THE

MEDICAL AND SURGICAL REPORTER.

No. 1476.] PHILADELPHIA, JUNE 13, 1885. [Vol. LII.—No. 24.

ORIGINAL DEPARTMENT.

LECTURE.

SANITARY IGNORANCE AMONG HIGH AND LOW.

BY ALBERT L. GIHON, A. M., M. D.,

Medical Director United States Navy, President of the American Academy of Medicine, Ex-President of the American Public Health Association, etc.

(*Concluded from page* 708.)

The city of Washington is fortunate in its natural sanitary advantages. Its admirable ground-plan, in which the defects of the rectangular system of streets are obviated by the broad intersecting avenues, secures a sweep of air from whatever compass-point it may blow. Its wide thoroughfares and open spaces make an aggregate area greater than that occupied by buildings. Its irregular contour-lines of elevation permit effective drainage. A hundred thousand shade trees bordering the smooth roadways, which are easily swept, control the chemistry of the atmosphere. The water supply is satisfactory, food is abundant, and the death-rate of its white population notably low. All this every citizen probably knows, and hence assumes there is nothing left to be done; but with all its boasted cleanliness, there are a thousand pest-holes in that fair city to become nests for the hatching of epidemic disease and foci for its radiation. A very casual observer can not fail to notice, even on thoroughfares daily traveled, shanties reared on piles surmounting stagnant pools, cellars never opened to light and air, heaps of decomposing refuse on neglected lots, sewer-inlets so habitually giving off offensive odors that one learns to instinctively avoid them by a détour. The only provision for the public health in the District of Columbia is in the form of a law establishing a Health Department, which is expected

1. To conduct the sanitary service, meaning thereby the policing and inspection of streets, alleys, lots, yards and houses.
2. To prevent the sale of unwholesome food.
3. To inspect all marine products.
4. To hinder the running at large of domestic animals.
5. To collect all garbage from dwellings.
6. To superintend the removal of night-soil and the collection and removal of dead animals.
7. To secure a full and correct record of vital statistics.

To provide for the sanitary service proper, six inspectors at a salary of $1200 per annum are allowed, but one of these is detailed for the medical control of houses in which infectious diseases, as diphtheria, scarlet fever and the like, occur, leaving only five for all other sanitary work over an area of three square miles of populous dwellings. The inspection of food in all this territory is intrusted to two men, who are expected to visit all the markets and provision stores, and arrest the exposure for sale as food of whatever may be unwholesome; while for the inspection of marine products, fish, oysters, clams, crabs, terrapin, and the sanitary care of fish-markets, wharves, and oyster-houses, there is but one. The prevention of the running at large of domestic animals is given in charge to a pound-master with four laborers; the collec-

tion of offal and dead animals is let out by contract; and the recording and tabulation of births, marriages and deaths, and the attendance of the sick poor, are the work of the health officer, with four clerical office assistants. For the salaries of health officer, inspectors and clerks, the munificent total of $17,000 is appropriated.

Civic organizations can scarcely be blamed for delay in recognizing health bureaus as an important and necessary part of their organization, since medical institutions have been tardy in elevating the Chair of Hygiene into a first place in their faculty. Pathology and its catenated Therapeutics, have till lately occupied the most prominent position, and even Physiology has been regarded as only introductory to the study of the phenomena of morbid action. At first a few schools established subordinate lectureships on Hygiene, frequently associated with Medical Jurisprudence, or some of the minor specialties. After awhile Hygiene appeared here and there as a distinct Chair, and now alone or allied with Physiology, it holds its proper rank in every medical college of standing—eighty of the 128 medical schools in the United States and Canada having such professorships. The science of Medicine to-day rests on the broad foundation of Biology. The scientific physician is the profound biologist. Disease is departure from health, and to prevent this departure becomes the first thought and highest aim of him who claims to be learned in Medicine. The mechanism of curative procedures comes into play, like the surgeon's knife, as the last resort. Shivered and splintered spars have to be repaired by cunning workmen—but the skilful navigator is prouder of having weathered the rock and ridden out the gale without them.

In every city, town and village, in every State government, and in the national establishment, there should be, and some day will be, a bureau entrusted with the care of the public health—and this not a mere titular office, but an elaborately organized department, under a sanitary chief, who shall not have one aid but many—health officers, sanitary inspectors, or whatever they may be called—competent, zealous, and properly remunerated. Their labors will be onerous, but their duties are honorable; their mission the glorious one of saving and prolonging life, of going about doing only good works, and thus adding to the sum of human happiness and social order. They must be authorized to enter every house, however exalted its owner's station, to examine its drainage and sewage system, its garrets and out-of-the-way closets, its cellars, yards and surroundings. They must have power to open every apartment and subterranean basement to the light and air—to drain them if wet, to clear out rubbage, remove soggy and rotten floors, and moldy straw, whitewash walls, cart away the accumulated heaps from obscure alleys and neglected lots, and superintend the sweeping of the streets. Even in Washington, where machines can do this latter work, the perfunctory methods of other cities are coming into vogue, though not as in Philadelphia, where, as I said upon another occasion, "living dirt envelops the whole city with its slimy mantle, and the patriot pilgrim to the shrine of Independence doubts which is the greater marvel—the spot where a great nation was born, or the pestiferous mud he has waded through to reach it." "In the very heart of that city—rather in its head—under the shadow of the Temple of Liberty, where the brightest minds among its fathers and sons daily win forensic laurels, one has to pick one's way through reeking pools of fetid ooze concealing the cobblestones, until partially swept into stinking masses by decrepit laborers with unwieldy brooms—little heaps of filth that lie till they roll back to a level, or are carried into the sewer to fester underground, and generate the sickening odor that arises from every street inlet. It is the fashion to ridicule the unprogressive Spaniard who, at the gates of Madrid, ploughs the field with a crooked stick, as his ancestors did centuries ago; yet here intelligent men daily witness this farce of street-cleaning, this tragedy of street-pollution at their very doors, and hold their peace—each hoping to escape, yet escaping only as he who has trodden blindfold over red-hot plough-shares." Great as the sanitary officer's task at the outset, fines and penalties would defray its cost, which is a proper burthen on neglectful owners. A moderate outlay would afterwards suffice, though the sanitary overseer's duty will be one of ceaseless watchfulness. It is not enough for him to be an occasional visitor; he must be ubiquitous and all-seeing—in school-rooms, churches, theatres, and public halls; in court-rooms, railway stations and market-places; in dairy, bakery, butcher's stall and grocer's store; in factories, shops and crowded tenements; in squatters' hovels and rich men's palaces; and without his certificate no building should be permitted to be sold or occupied.

Who so qualified to do this work as the educated physician? The sanitary field is legitimately his own. Three-fourths of the registered physicians in this city might be actively employed upon the exclusive work of keeping disease out, and leave scant occupation for the rest in combatting what had crept by in spite of them. There would be fewer prescriptions written, and the gaily-decorated apothecary shops would drive a more salutary and reputable,—if not so profitable a trade, in selling soaps and cosmetics, and *articles de luxe*, instead of the pills and potions, and other horrid farrago, on which, like rotten staves, the blind ignorantly lean and seek support.

In all this discursive talk in which I have indulged, I do not pretend to have told you anything you did not already know. I have only sought to impress upon you who are wise the sense of your responsibility for your neighbor's ignorance, as that affects the public weal for which we are all accountable. The story of pure air, and good food, and outdoor exercise, may be a trite tale; but what have you done to keep this air pure and this food free from adulteration? Doubtless you all devoutly go to church, and coutribute liberally of your means to clothe the savage—perhaps the very race whom M. Hornaby described to us a few weeks ago, whose scant attire is a piece of bark; who are chaste and virtuous, though they know neither God nor priest; honest and upright, though they have no law; peaceable and happy, though they live ungoverned and uncontrolled; healthy and vigorous without drugs aud doctors: sharing their island home with the ourang, their only neighbor, they, nevertheless, exhibit all the traits of the noblest humanity—their children obedient, their wives immaculate, woman respected as the peer and partner of man. Contrast these savages with the products of civilization. Uncleanness, disease and vice are unconcealed. In the foul suburbs of the poor, which the wealthy never enter, the rumshops stand on all four corners of every block, while children cry and fight for food. The unclean beasts, who talk, kennel themselves in foul, stinking tenements, where crime, the incestuous offspring of disease and filth, does not even seek to clothe itself. In the shanty of the city, or the remote log cabin of the frontier, the grimy creatures, who disdain to recognize their ancestral kinship to the ape, live in greater squalor. Dr. Scott relates the case of a native of Missouri, who had not been wet all over since 1863, and, astonished at the fact, he made inquiry, and found that not one-third of the people bathed once a month, and that fifty per centum did not take a full bath from October to May. I am sure the figures are not exaggerated. Here then is a missionary field—to preach the gospel of cleanliness. You have only to look critically at the masses as you encounter them every day to detect the great unwashed. Can there be a more blessed charity than to enlighten them as to the beauty and grandeur of this human body, and the necessity of grooming it into suppleness, cleanliness and strength? Can physicians confer a greater boon upon humanity than by becoming the leaders in such a propaganda? Let them fearlessly proclaim as the cardinal doctrines of their own faith, that health is strength, health is true nobility, health is happiness, health alone is wealth.

If medical men have not been regarded as health protectors as well as health restorers, it is because they have too tacitly acquiesced in the general belief that the latter is their only function, and they have consequently deserved the imputation of rejoicing in the outbreak of an epidemic or the occurrence of a sickly season for the greater harvest of fees it would bring. Undoubtedly the practitioner of medicine must gain a livelihood, and if his income is to be determined by the number and severity of his cases, it would be unfair to censure him for welcoming the summons to the bedside of a victim of typhoid, or the stealthy visit of one cursed by some constitutional taint; but what physician, who regards medicine as something more than a trade, does not feel sad at heart to know how easy it were to have averted the fever or the poisoned blood? Is it not a cruel necessity that compels him to take the fee from the half-starved sufferer, who ought to keep it to buy bread for herself and the famished children whose very eyes cry hunger? Is it right that in this Christian land the young graduate must himself look for means of living to those who come to him because he is cheaper than the doctor whose sign is weatherbeaten or has given place to the more aristocratic door-plate? Is it right that the poor can only look for succor to that skill which they can buy?

What is right?

The public health should be the paramount question of social polity. Individuals should be educated from childhood to the knowledge of the importance and dignity of their bodies,

and the necessity of keeping them sound, as well for their own greater personal benefit and pleasure, as that the descendants they leave may be worthy of them. The men who have made the intimate structure of their bodies and the laws of life their life-long study and vocation, should be the ministers of health, looked to for advice, and properly rewarded for their services. The stipend of the family physician should not depend upon the accidents of disease, but he should be the paid sanitary adviser and counsellor of the household, earning his salary when they are well, as when they are ill. A corps of well-renumerated sanitary officials should guard the avenues by which disease can enter, and hospitals, asylums, infirmaries, dispensaries and cliniques, should be multiplied for the poor, and supported by the churches in common, as the mission work that will bring most gladness to the earth, for disease is the parent of crime, as it is itself the child of the unclean.

Is all that Utopian?

This at least is hideous truth. The child, who loses its life from a preventable disease, is murdered by its indifferent parents. The unhealthy school-house is a living charnel. The advent of an epidemic is a crime chargeable upon the citizen who has neglected to urge with all his might the sanitary precautions that would have kept it away. Ignorance of the law does not protect its criminal violation: why should ignorance of sanitary laws be any less reprehensible?

COMMUNICATIONS.

DISEASES OF THE SKIN OF REFLEX NERVOUS CAUSATION.*

BY WM. T. CORLETT, M. D., L. R. C. P. LOND.,
Professor of Dermatology in Wooster University, Cleveland, Ohio.

However important we may regard the nervous element in the evolution of skin diseases, two distinct varieties of *neuroses cutaneæ* present themselves to the clinical observer.

One is a

SENSO-NEUROSIS,

in which the characteristic feature is a disturbance of cutaneous sensation, unaccompanied by any visible lesion. Impressions made on the peripheral nerves are transferred ere they reach the sensorium commune, and are recognized as coming from parts more or less distant from their actual source. Transference of impressions is not limited to diseases of the skin, neither is it always pathological; clinical experience has taught the surgeon to seek at the hip-joint for the source of the pain which the patient refers to the knee; he sounds for stone in the bladder when the pain is in the glans penis; in like manner, if any part of the respiratory tract be irritated, the sensation will be referred to the larynx.

The second variety is a

TROPHO-NEUROSIS,

which is characterized by anomalies of nutrition. As subdivisions this includes anomalies of secretion and pigmentation. Like the first, this variety is sometimes physiological, but it differs from it in that the incoördination affects the vaso-motor or trophic, instead of the sensory nerves. In this, impressions made on the sensory cells of the cerebro-spinal ganglia are transferred to the motor or vaso-motor cells, and finally reappear at the periphery as muscular contractions or trophic changes. The impression which was received from the larynx straightway passed from the sensory to the motor cells, which in turn gave rise to momentary muscular contractions—a cough.

Impressions are transferred more readily from cell to cell when the latter are in a state of exhaustion; thus a sudden and unexpected noise, a flash of light, will call out motor and vaso-motor action—a shock, a blanched cheek—in one laboring under nervous debility.

Neuroses of the skin are met with in such neurasthenic persons, either when they are suffering from pathological changes in the viscera or when the viscera are undergoing physiological evolutions—as pregnancy—thus becoming remote foci of irritation.

Pruritus is a representative senso-neurosis, and as a disease *sui generis* and not a mere accompaniment of cutaneous inflammation, may be brought on by irritating afferent nerves in distant parts of the body; generally, too, we can point out the offending member by the character and location of the pruritus.

After a study of several years on this subject, let me summarize the conclusions drawn therefrom as follows: Pruritus of the palms and soles is usually met with in females having some mild ailment of the uterus of long standing. Pruritus of the scalp, at times accompanied by a sense of weight, is met with most frequently in women with a subinvoluted uterus or with a ruptured perineum. Pruritus vulvæ, unaccompanied by

*Read before the Ohio State Medical Society at Dayton, June 6, 1885.

vaginal discharge, is a common symptom of pregnancy; less frequently it precedes each menstrual flow. In the male the most troublesome pruritus occurs in the genito-anal region, usually in adults subject to constipation; in two cases helminthiasis was thought to be the exciting cause. It is often difficult to diagnosticate this affection from eczema on account of the delicate skin of the parts. When I first encountered this disease I called it eczema, and thought it due to blood stasis, as one so often sees on legs with varicose veins, but I do not now so regard it: because it seldom accompanies hemorrhoids; because it first appears as a pruritus, and later, when lesions of the skin appear, they are the outcome of vigorous and oft-repeated scratching; because other anomalies of nerve influence at times accompany or alternate with that of sensation; and because it is frequently limited to one-half of the body. The points herein given may be readily exemplified in the cases which follow.

Case 1. C. B., male, aged 44. Married, a salesman who holds a responsible position, he takes but little out-of-door exercise, and has not taken a vacation for years. He is of a neurasthenic type, has been habitually constipated for several years, and during the last three has been afflicted with furunculosis. Six months ago (Aug. '83) pruritus of the scrotum first appeared. He said at night, after going to bed, the right side of the scrotum and adjacent surface of the thigh would transpire so freely that the bed-clothing would be perceptibly moistened thereby; in a few minutes this would be superseded by itching so intense that sleep was impossible for several hours. For a time there was no tendency to dermatitis, and the nail-marks of these nightly invasions healed kindly. When I saw the case it appeared to be eczema marginatum with considerable induration. I did not recognize its neurotic nature until I saw that the sweating preceded each application of a strong solution of caustic potash, which preceding applications had taught him to dread. With a few weeks' treatment the dermatitis disappeared, but the pruritus remained until free daily evacuations from the bowels were established. The questions which naturally arose were these: Was not the exciting cause the presence of effete products in the blood which acted on the sensorial ganglia? If so, why should it select the ganglion presiding over this particular region? Or was it impacted fæces which irritated the afferent nerves, they acting reflexly on the skin? The latter I think the true explanation, and the class represented in the next case tends to confirm this view.

Case 2. D. C., male, aged 30, a carpenter, of neurasthenic temperament, had suffered the three years last past from a severe pruritus of the genito-anal region, which he supposed to be "itching piles." Paroxysms of itching would set in every evening at 4 o'clock, and continue with but few and short intermissions until 3 in the morning. The suffering was so great that he threatened self-destruction if he could not find relief. An examination as to the cause of the itching left little doubt that helminthiasis had much to do with it, as thread-worms were found in abundance. Suffice it to say, that the pruritus disappeared with the disappearance of the ascari, and in my opinion it was due to radiated sensation from an irritated colon.

Case 3. Mrs. R., aged 38, complained of being very nervous, also of an eruption on her scalp, which had existed two years. My diagnosis was eczema capitis, and I prescribed accordingly. At the end of a week I saw her again, when the eruption was much better, but the pruritis had not abated correspondingly, as three deep nail marks attested. At the end of a fortnight the lesions had disappeared, but the pruritus remained; local measures were employed for this without avail. Upon inquiry the patient said that during each pregnancy she had suffered from pruritus vulvæ.

Dr. M. Rosenwasser, to whom I am indebted for the case, said the only pathological state he had discovered was a subinvoluted uterus. The case is still under observation.

Case 4. C. J. H., male, aged 30, holds an important mercantile position which confines him within doors; he is an excessive smoker, and says he is very nervous. He consulted me for troublesome itching, which had existed in the same position on the left side of the perineum for two years; there was but little accompanying dermatitis. The feature I wish to bring out in the history of this case is this: the patient had been troubled with constipation since he took to office work, five years ago, and since the pruritus appeared he noticed it was influenced by the condition of his bowels. When they were free the pruritus disappeared, and the more constipated he was, the more severe the itching.

Three months' treatment, consisting of a slight change in the routine of his daily life, with tonic laxatives, has given him complete relief for one year up to the present writing.

The remaining cases are tropho-neuroses.

Case 5. Sarah B., aged 17, unmarried, apparently in good health, barring an eczema of the

lower extremities, and irregular menstruation; the former had existed two years, the menstruation had never occurred with regularity, but at periods varying from three to six weeks. The special feature of the case is that the eruption rapidly subsided just before each menstruation, and regained its former severity about a week afterwards. This peculiarity was first noticed by the patient soon after the eruption appeared, and I had the opportunity to verify it while she was under treatment. I was not permitted, however, to investigate to any great extent as to the cause of the irregular menstruation, and she passed out of sight only partially relieved.

About three years after this I saw her again. She said the eruption had troubled her until a year ago, when, without treatment, it left her. Upon further inquiry, I found this corresponded in time to her marriage. She had a child two months old.

Case 6. Mrs. L., aged 59, a widow, had a vesicular eruption appearing, not unlike hydroa, on the back of the right hand, and radial side of the middle finger of the left.

The family history is unimportant, save in the fact that a sister of the patient is insane. Her previous condition had been free from bodily ills, except the "whites," which came at the age of 40. At the climacteric change, which took place at 54, the eruption first appeared, and maintained the same character and occupied the same positions to the end. In brief, four months' treatment availed nothing, until she obtained relief from a retro-flexed uterus with endometritis, when the eruption subsided under the same treatment which before had been unavailing.

To conclude. The most marked tropho-neuroses coming under my own observation have closely simulated eczema; but, unlike eczema, the eruption, whether papular, vesicular, or squamous, remains as such throughout its entire course.

Derangements of the sebaceous glands have been previously spoken of in this connection;* Next to the eczematous group, they are the most frequent.

Senso-neuroses are, *cæteris paribus*, more frequently associated with conditions of a mild nature—functional disturbances, nerve irritation, and the like—whereas tropho-neuroses, *cæteris paribus*, more frequently accompany pathological conditions of a graver import, *e. g.*, nerve-lesions, or gross destructive changes in the cerebro-spinal substance; although we must admit that the latter also are not infrequently due to functional disturbances alone.

* Columbus Medical Journal for October, 1883.

SPONGE-GRAFTING.

What Becomes of the Sponge?

BY JOHN C. COTTON, A. M., M. D.,
Of Meadville, Pa.

Among the discoveries in modern surgery, grafting deservedly occupies a place of eminence. So much can be accomplished that was impossible before its adoption, and results are so much more satisfactory, that grafting, in some form, must continue to be an approved procedure in plastic surgery.

Sponge-grafting, discovered by Dr. D. J. Hamilton, and introduced to the notice of the profession in a paper published in the *Edinburgh Medical Journal* for December, 1881, as a substitute, in a measure, for skin-grafting, has many advantages over the latter procedure. Among others, the most important, probably, is that in anoplastic surgery it accomplishes what skin-grafting does not, namely, builds up or reproduces lost subcutaneous tissue, both muscular and cellular.

How this is accomplished has heretofore been a matter in controversy, there being a wide divergence of opinion in reference to it by surgeons, both in this country and Europe, who have had successful experience in the use of sponge-grafts.

By some it is claimed that the sponge, after forming a temporary trellis or support for the new granulations, when they are able to support themselves becomes digested and absorbed. By others, it is maintained that the sponge itself becomes organized and forms a constituent of the new growth. Still others contend that the sponge simply affords a proper covering for the new granulations, and by its presence stimulates their growth; and when this is accomplished, it is thrown off as effete matter.

Dr. Norman Porritt, who reported the first case of sponge-grafting in the *Edinburgh Medical Journal*, May, 1882, after the original report of its discovery in the same journal in the previous December says: "The sponge, since the last note, has been dragged more deeply into the wound cavity," and in the final note on the case, remarks, "the whole of the sponge, with the exception of very small particles, has disappeared."

In a recent letter from Dr. David Prince, of Jacksonville, Ill., who has had considerable experience in sponge-grafting, and is decided in his approval of it, he claims "that the sponge finally disappears, after having been inclosed in the new-

formed tissue by such a digestive process as catgut and silk undergo closed in a wound as sutures."

This opinion is endorsed, as far as the sponge being inclosed is concerned, by D. W. Perkins' case in an article in the *British Medical Journal* for January, 1883, in which he reports a successful case, and declares that "the sponge seems to be completely organized."

The theory of inclosure of the sponge is controverted by Dr. W. Winslow Hall, in the *Medical Times and Gazette*, in the spring of 1882, where, in reporting a case of indolent ulcer of the foot, he says: "As the case wore on it became evident that the sponge tissue was not becoming incorporated in the patient's foot. It rose by degrees in the wound, and fragments were clipped away from its surface."

To contribute something to the solution of this problem, a series of observations was instituted, the results of which will be given in this paper, as also somewhat of the literature of the subject. A brief account of the method of preparing the sponge and applying it, is also here inserted for the benefit of those who may not have given the matter special study.

This method, although differing in minor details, according to the notions of different surgeons, yet in the main features is essentially the same. It is as follows: The best Turkish sponge is selected, which must be thoroughly beaten, then immersed for four or five days in a 20 per cent. solution of muriatic acid. At the expiration of that time it is carefully washed in some alkaline solution, to neutralize the acid and free it from calcareous and silicious substances, when it is soft as velvet. One drachm of iodoform is then added to an ounce of sulphuric ether, the sponge immersed in this solution in an air-tight vessel for a couple of days, when the ether is permitted to evaporate, and the sponge is thus thoroughly impregnated with iodoform. It is then cut into thin slices or shavings, across the grain, about one line in thickness, with strong, sharp scissors. The grafts are now ready for use, but they can be preserved in this form indefinitely in an antiseptic solution, such as listerine, or a 10 per cent. solution of carbolic acid.

The mode of applying it is as follows: Shavings of sponge are packed in the wound or sore, first gently scraping the bottom of the cavity till it bleeds; the grafts are then covered with mosquito-netting, over which is placed absorbent cotton, and the whole enveloped in oil silk, which is secured in position by a common roller bandage. This dressing is not disturbed for a week by some, in two or three days by others, when, if successfully planted, the sponge will be found firmly adherent to the sore. Some difficulty has been experienced from the accumulation of fetid pus in the meshes of the sponge, which cannot be cleansed without disturbing the tender granulations. The iodoform with which the sponge is at first impregnated, for a time will relieve this difficulty, but in a few days other means must be resorted to. It will not do to rely on a continued use of iodoform, except in chronic cases or indolent ulcers, in a patient much reduced, as it is too stimulating, and results in a fungous growth. A 20 per cent. carbolic acid solution or a saturated solution of boric acid, will meet every indication, and not interfere with the reparative process.

The literature of this subject is not voluminous. The first paper announcing its discovery, as previously stated, appeared in December, 1881. The second paper on the subject was by Dr. Porritt, above referred to. He reports the case of a burn on the cheek of an anemic boy, æt. 14, the sore being four inches long and two wide. For the first two weeks poultices and carbolic oil were applied. At the end of that time, pale granulations were observed at the bottom of the cavity, which was one-third of an inch in depth. Into this cavity sponge, prepared according to the method above described, was accurately placed, filling it somewhat above the surrounding surface. The patient was discharged from the hospital in a little over four months cured.

The next case of successful sponge-grafting that was found was by Dr. Hall, also above referred to. The patient, a pale, wasted girl, æt. 20, had indolent ulcers on the dorsum of the foot, the largest being three inches in circumference, and quite deep. This was also packed full of medicated sponge, and after treatment continuing through three and a half months, she was discharged with little or no deformity, and with a pliable cicatrix, while in other and smaller ulcers, that in former years had been entrusted to nature to effect a cure, the result was cicatrices firmly adherent to the underlying bone.

In an address on "Some Observations on Sponge-grafting," delivered before the Tri-State Medical Society at its session in Indianapolis, September 9, 1883, and published in the *Weekly Medical Review*, St. Louis, Dr. Edward Borck details three cases which occurred in his dispensary practice, which were as follows:

1. A case where an adult male had indolent ulcers on his legs for eleven years.

2. A female who suffered from syphilitic infection, where the whole left gluteal muscle was eaten out.

3. Where almost the whole of the integument was torn from the dorsum of the hand.

The results in all these cases were most satisfactory. In the case of the female, the doctor says "the whole gluteal muscle was reproduced, with strong skin covering."

In addition to the above, the following references to some of the earlier papers on the subject were furnished me by John S. Billings, M. D., Surgeon U. S. Army, and Librarian Surgeon-General's office:

Burnett (J.), "Sponge-Grafting; a Successful Case," *Med. Record*, New York, 1882, xxii., 500.

Estes (W. L.), "Sponge-Grafting," *Med. News*, Philadelphia, 1882, xli., 590–592.

Sanctuary (T.), "Three Successful Cases of Sponge-Grafting, with Remarks," *Brit. Med. Jour.*, London, 1882, ii., 1202.

Franks (K.) and Abraham (P. S.), "So-called Sponge-Grafting," *Jour. Anat. and Phys.*, London, 1882–3, xvii., 349¼.

Whitman (R.), "Sponge-Grafting," *Medical Record*, New York, 1882, xxii., 402–404.

June 12, 1884, I commenced the treatment of a case of indolent ulcer on the leg, of twenty years' standing, the history of which is as follows: Mrs. F., æt. 49, married for many years, without issue, has been addicted to the opium habit for twenty-five years, consuming in later years an average of an ounce of the gum every week. She is anæmic and much debilitated; her mind, also, either sympathizing with her general weakness, or as a result of the protracted use of the narcotic, is decidedly childlike. There is an ulcer three inches in circumference and one-third of an inch in depth, situated on the anterior surface of the leg, midway between the ankle and knee. There is an apparently marked contraction in the whole circumference of the leg involving the sore of about four inches in length, the leg being enormously swollen above and below this circular band.

Six years ago I attempted to cure this ulcer and one on the other leg also, with nitrate of silver and carbolic acid, topically, giving support by stearine bandages, with generous diet and quinine and iron internally. After a constant and painstaking effort of six months' duration, I only partially succeeded, one ulcer healing with a hard, contracted cicatrix, while the other remained open. The ulcer, June 12, is discharging profusely a fetid, unhealthy pus; the granulations on the margins are pale and weak, the whole case being most unpromising; so that if ultimate success is not obtained, it would not argue strongly against sponge-grafting.

Charcoal poultices were at once applied with carbolic acid solution, 1 to 40, as a wash, while the sponge was being prepared. Cod-liver oil, quinine, and pepsin, were prescribed internally.

June 18. Medicated sponge was applied, at which time the discharge of pus was somewhat diminished and, of course, the odor less offensive. The sponge, according to directions, was covered with mosquito netting, the principal advantage of which is, as is supposed, to prevent the overlying absorbent from adhering to the sponge and being dragged in dressing, and so disturbing the tender granulations.

June 20. Removed the bandage and changed the cotton. The discharge was profuse, but without odor.

22. Changed external dressing as at last visit. The discharges now becoming somewhat offensive, I saturated the fresh cotton with the same solution of carbolic acid, cut an opening in upper border of oil silk, and poured acid solution in upon the grafts. Elevated the lower border of dressing slightly, and found margin brighter and more healthy.

24. Six days after planting the graft, removed all the dressing down to sponge, and, instead of finding a putrid mass of detached, black sponge, as under the unfavorable circumstances at the beginning I had reason to apprehend, was pleased to find the sponge adherent, with a tint decidedly pink over more than half the surface. The general condition of the patient was but little improved, however, with no appetite.

28. One-half of the sponge was more decidedly red, the balance not looking quite so well, pus more offensive, still no appetite.

30. Found upper half with decidedly reddish hue, sponge deep and firm, the lower half not so red, with a tendency to rise in the wound; tongue some better. Continue cod-liver oil, quinine, and pepsin.

July 2. Granulations entirely through upper half of surface, with sponge imbedded and disappearing, lower half looking somewhat better; tongue decidedly improved.

5. Appearances not so favorable; pus offensive, sponge darker where visible, granulations not so bright; condition attributed to over-exertion on the day previous.

8. Somewhat improved, upper half looking

well, on lower the sponge looks dark and puffing up. Am not certain whether granulations are pushing from beneath or not. Did not clip away the dead portion to ascertain the exact condition, as the determination had been made to reach the result without such interference.

10. But little change. Saturated sponge with a solution of half a drachm of iodoform in an ounce of alcohol, adding a small quantity of glycerine.

12. No odor, and but little discharge. Sponge texture not recognizable over upper half; the balance looked dead, dark, and dry. With a dull bistoury, the edge of this dark crust was loosened and elevated, and healthy granulations were found beneath.

16. Removed a portion of black crust, remains of sponge, and found it thin as paper. On raising it carefully, observed shreds, mere filaments, adhering by one end to the under surface, the other extending down into the new growth, evidently the undigested remains of the sponge-structure, which, being attached to the effete crust, was not digested as rapidly as that portion which was entirely enveloped by the new granulations.

18. One month after planting, a double pneumonia has supervened, and granulations that had afforded such satisfaction give signs of disorganization and sloughing.

23. Some improvement in general condition, also in appearance of sore. Removed balance of black crust without violence to granulations underneath. Irrigated the surface with a saturated solution of boric acid.

25. The strength considerably broken by pulmonary attack, no appetite, expectoration profuse; the sore, notwithstanding, continues to improve, all the sponge has now disappeared, and granulations fill the entire cavity.

Aug. 2. Patient attacked with a hemorrhage from the bowels, this followed by dysentery, then prevalent, threatening serious consequences. Pneumonia has almost entirely disappeared. The sore, however, looks remarkably well. An island of integument, as large as a nickel, has formed in the centre of the new growth, with a projection of same from the margin extending toward the former.

This is the last note made in this case, but in a few weeks following the integument extended over almost the entire surface, in spite of the untoward circumstances. The sore, however, never entirely healed, but during the fall and winter, under the combined effect of disease and opium, it gradually became indolent, the new structure by degrees broke down, and finally the patient was attacked once more with double pneumonia, to which she succumbed February 11, 1885.

It is believed that, without arrogance, the following deductions can be legitimately drawn from the history of the above case:

1. The sponge is not organized, but simply forms a support for the new granulations, which shoot up and interlock or coalesce through its meshes until they become sufficiently strong not to require an artificial prop, when it is digested.

2. The sponge sometimes does rise in the wound, but in such cases it is the result of accident, such as want of sustained, equable compression, etc. When perfectly successful, it should adhere to the base of the cavity and be completely enveloped in the new structure.

3. Epithelial cells are not always derived directly from an epithelial margin, but may be transmitted through a medium, probably pus.

Whether the sponge, after digestion, is absorbed or thrown off with purulent matter, or partly both, is left for future observers to determine.

In a second case, Mr. C., æt. 57, had a small indolent ulcer on skin, complicated with eczema, and large varicose ulcers of entire leg, which resisted the usual methods of treatment. The cavity was filled with medicated sponge, and in ten days the sponge was entirely covered with new tissue, and the wound healed rapidly.

In a third case, now under treatment, Mr. Henry, æt. 25, had his hand caught in an elevator in a grist-mill, the third finger torn off at knuckle, and a large portion of integument on dorsum of hand stripped off, which was found attached by only a shred. A portion of this flap, about one and a half inches square, sloughed deeply, leaving the extensor tendons almost bare. To prevent a contracted cicatrix from interfering with their use, the cavity was filled with prepared sponge, which adhered firmly, and gives promise of accomplishing all that was intended, by reproducing the lost subcutaneous tissue.

—An exchange says Koch's "comma bacillus" appears to be having a hard time of it among the experts. First, Dr. Klein showed his contempt of it by swallowing it, and now Dr. Lancaster has the unkindness to say: First, it is not comma-shaped; second, it is not a bacillus; third, it does not always occur in the intestines of cholera patients; and fourth, there is no good evidence that inoculation with it produces cholera. In fact, the poor thing appears to be about annihilated by its critics. Cholera, though, will remain undisturbed by it, and relentlessly claim its thousands of victims as heretofore.

Hospital Reports.

CLINICAL LECTURE ON CARDIAC DISEASE IN ADOLESENCE—ACUTE AND CHRONIC ENDOCARDITIS.

BY JOHN M. KEATING, M. D.,

Visiting Obstetrician to the Philadelphia Hospital, and Lecturer on Diseases of Women and Children.

Reported by WILLIAM A. EDWARDS, M. D., Ass't. Dem. Clin. Med., University of Pennsylvania; Medical Registrar, Philadelphia Hospital.

GENTLEMEN: I cannot overestimate the importance of a careful and intelligent study of the diseases of the heart in early infancy and childhood; in children serious disease of the heart may be accompanied by extremely slight symptoms; for example, in a case that you may consider simple fever, rheumatic inflammation may attack the heart before any other signs of rheumatism have manifested themselves; hence, I would impress upon you the importance of resorting to auscultation in even the simplest cases of fever; particularly should this be your rule in the eruptive fevers, notably scarlatina, which, as you know, is such a prolific cause of disease in the central organ of the circulation.

West* tells us that in three cases of pericarditis, in ten of endocarditis, and in two where both peri- and endocarditis were associated, or in fifteen out of one hundred and twenty-two cases, the disease of the heart was traced to an attack of scarlet fever. The cardiac complication may arise at any period of an eruptive fever; but it is, perhaps, more usual to find the cardiac disease manifesting itself in the subacute stage; as, for instance, the symptoms may show themselves during convalescence from typhoid fever, or during the desquamative stage of morbilli or scarlatina. The circulating fluid appears to undergo some morbific change in these cases, that, if it is not the cause of, at least predisposes the endocardium to take on inflammatory action. As an obscure cause of acute heart disease, it is, perhaps, worth mentioning cardiac abnormalities or malformations.† If you should meet one of these cases, it is almost superfluous in me cautioning you to use no active treatment in handling the case, but to let your therapeusis be rather expectant than aggressive. A frequent cause of heart disease in your little patient is extension of inflammatory action from the pleura to the pericardium.

Careful auscultation of the young child is difficult indeed. The disease has already made him restless, which will be greatly increased by your manipulation. Your little patient cannot aid you at all in making up the diagnosis.

You must also know that you will meet a certain proportion of cases, the cause of which it will be impossible for you to discover. I should consider this to apply more to cases of endocarditis than to pericarditis, as the cause of the latter is perhaps more discernible.

Occasionally you will note heart disease following a traumatism of the chest.

Let me now present you this child, suffering with *Acute Endocarditis*. This disease may exist alone or in combination with pericarditis, when you must be on your guard that the latter does not mask the former. As West tells us, in one hundred and five cases, thirty will be masked by pericarditis, and in seventy-five the endocarditis will be uncomplicated.

Our patient, Willie W., æt. 13, complains of great uneasiness about the heart; the palpitation you can all notice, and if you will look carefully, you may note increased impulse, with irregular action; the respirations are short and quick; dyspnœa may deepen into orthopnœa. The temperature rises several degrees; at times a chill is observed. Pulse is frequent—130, 140, 160—with irregular rhythm, presenting intermissions and irregularities in the pulsations. The urine is slightly albuminous.

The symptoms may vary in degree. In some cases so urgent and severe are they that our best efforts and attention are required to bring the case to a successful termination; another case may be so slight as to almost elude our observation; hence in cases of acute rheumatism, you should practice careful daily auscultation, and even then, with all your care, a case may escape your notice and pass into the chronic stage of the disease; and then only will vulvular disease be recognized, when the symptoms make themselves known by the distress that they cause.

In acute endocarditis a murmur will be heard shortly after the symptoms of endocardial inflammation have arisen. The murmur may be either blowing, rough, soft, short or prolonged; at times you will hear a musical or metallic murmur. The site of the murmur depends of course upon the situation of the lesion; and on account of the great frequency of the lesions at the mitral valve the murmur is heard particularly at the apex.

In the fœtus, in whom the right heart acts more vigorously than the left, endocarditis affects the former more frequently. Rauchfuss* collected one hundred and ninety-two cases of endocarditis on the right side in the fœtus, and only fifteen cases on the left side.

In young children cardiac murmurs have a greater distribution than in adults; you will probably hear this bruit all over the præcordia, but its point of maximum intensity will be at the apex; the murmur will be systolic in time, synchronous with the apex beat and the carotid pulse, heard also in the axilla and at the point of the left scapula. This murmur would be known as mitral insufficiency or regurgitation.

Position may have some effect upon the murmur. Sidney Ringer, Hardy and Behier state that it is increased when the patient is sitting; Cuffer advances the opinion that it is intensified in the recumbent position. The murmur is probably made more distinct by causing the patient to lean forward, thus throwing the cardiac apparatus against the chest wall. The auscultatory signs of course differ as the endocardial inflammation is differently situated; as for instance if

*Diseases of Infancy and Childhood, sixth edition, 1874.

†Those of you who may desire more extended information on this subject, I would refer to the cases that Dr. T. B. Peacock has at various times presented to the London Pathological Society.

*Diseases of the Heart. Constantine Paul, 1884, p. 79.

the aortic orifice is attacked, the symptoms will differ to a remarkable degree, so also with the systemic symptoms.

If the vegetations are large enough, they will cause a narrowing of the aortic orifice, and the aortic obstructive murmur will be heard, purely systolic in time, rough and superficial, but little affected by change of the patient's position, heard plainest at the second costal cartilage to the right of the sternum, also in the carotid circulation in the neck.

Should the lesion have caused the valve to become insufficient or incompetent, the murmur again becomes different; its time is now diastolic, more apt to be soft and deep in tone; here position has some effect, as the standing posture enables the blood to flow more freely in its reversed direction, into the ventricle, thus making the murmur more plainly heard. In some of these cases it will not be necessary to even apply your ear to the chest; so loud are the murmurs that they may be heard with the ear removed from the præcordia.

Dr. Wm. Osler* has recorded a remarkable heart murmur in a little girl, which could be heard at quite a distance from the chest wall.

The case may go on to a generally weak and anæmic condition, will grow thinner, with increased cardiac palpitation becoming very distressing, emaciation progresses, cough arising, which will be frequent and short, with little expectoration. The heart's action is now apt to be violent and tumultuous, the case growing worse, emaciation increasing, cough more alarming, with blood-streaked sputa or even hæmoptysis, great distress or pain in the chest; anasarca supervenes in the extremities, increasing dyspnœa, and finally death. A post-mortem of little patient revealed the following condition: *Heart.*—Right side normal; left auricle, wall is rough from fibrinous deposits, mitral valve thickened, rough and covered with concretions; left ventricle, walls hypertrophied, cavity dilated, aortic valves slightly affected. *Liver*, large and pale. *Spleen*, enlarged and friable, capsule somewhat thickened. *Kidneys* healthy, but very anæmic, supra-renal capsules normal.

The mitral valve was somewhat corrugated, and had undergone slight adhesions to the adjacent tissue. The vegetations have been shown by Cornil and Ranvier to be due to a proliferation of the cells of the flattened layers, with infiltration of white blood globules, and a hyaline layer of fibrin. Klebs† and Osler‡ state that the vegetations generally contain micrococci, though it is in ulcerative endocarditis that these organisms play a more important role. Klebs (*Archiv. f. Experiment. Path.*, Bd. vi.) distinguishes two forms, one met in septic, and the other in rheumatic cases, and even the bacillus tuberculosis has been found in the vegetations on the valves in a case of phthisis.‖

A portion of the vegetations may be carried off into the general circulation, as an embolus. According to Sperling, the various organs will be affected in the following proportions:

Kidneys	57 times.
Spleen	39 "
Brain	15 "
Skin	14 "
Liver and intestines	1 "

It is also interesting to note the location of the endocarditis, as furnished by Sperling, in three hundred cases: Mitral valve, one hundred and twenty-five times; aortic valve, one hundred and twenty-nine times; tricuspid valves, twenty-nine times; pulmonary valve, three times.

Case 2. John ——, æt. 10 years. Patient has had chorea and frequent attacks of bronchitis. The apex beat is seen in sixth interspace on nipple line, it is displaced downward and to the left; loud systolic bruit is heard at apex, transmitted to point of left scapula. Much emaciated, expression anxious, and respiration quick, præcordia bulging. Complains of sick stomach. Feet commenced sweating about six weeks ago. Liver somewhat enlarged; ascites. Albuminuria is also present.

This case seems to illustrate *chronic* or *sclerotic endocarditis;* in these cases the right heart is affected most frequently in the fœtus, the mitral valve in early life, and the aortic in old age. The lesion is first one of hyperplasia of the connective tissue, forming an induration which causes atrophy in adjacent elements, the parts soon become retracted, and eventually undergo fibrinous or calcareous transformation; these calcareous vegetations may form a saw-like structure around the edge of the valve or higher, near the orifice.

Even in young children you may meet cases in which several murmurs are present; a case of a boy æt. 9, who was under our care some time ago, presented mitral regurgitation, aortic obstruction and regurgitation, presenting no normal heart sound whatever, as the mitral and aortic obstruction marked the first sound, as did the aortic regurgitant the second; so there were but the pulmonary and tricuspid elements of the normal sounds left, and these, as you know, are much less distinct than the sounds on the left side.

Your patient with chronic valvular disease is liable to many *secondary affections*, if the case runs a prolonged course.

Pulmonary congestion is a frequent cause of alarm. In regard to it Gendrin* says the pulmonary congestion and hæmorrhage are manifested during the first period of diseases of the heart; i. e., in that period of the disease during which the organism has not suffered any great deterioration from the prolonged functional disorder, either of the heart or lungs. These congestive phenomena are found to develop especially in those young subjects who have not yet suffered from anasarca, and still maintain a healthy color of the skin.

The liver may be affected; its first secondary lesion is hyperæmia; soon blood stasis occurs in the organ; it increases in size, as we saw in Case 2; its capsule is stretched. The biliary secretion is not as much impaired as you would suppose, but the mucous secretion of the canals is increased,

*Med. Times and Gazette, 1880, p. 432.

†Rosenstein: Krankheiten des Herzens, p. 99. Leipzig, 1879.

‡ Gulstonian Lectures on Malignant Endocarditis, 1885.

‖ L'Abeille Médicale, No. 51, 1884. Cornil.

*Lecons sur les Maladies du Cœur, p. 217, 1842.

which may retard the passage of bile, and thus cause a slight jaundice. The gastro-intestinal canal also becomes congested, its secretion arrested, and its tissue infiltrated with serum; the mesentery is also congested, the lymphatic glands may enlarge, the spleen becomes increased in size, the pancreas infiltrated, and an ascitic effusion may arise in the abdomen, as we saw in the case of John ——.

You will readily understand that digestion and assimilation become difficult under these circumstances.

The œdema of the lower limbs which these cases often present, is due to the stasis in the vena cava, causing swelling of the lower extremities; albuminuria also lends its aid in rendering the œdema more marked.

The kidney is an organ prone to be secondarily affected. The "heart-kidney" is of quite frequent occurrence on the post-mortem table.

The nervous system also succumbs to the cardiac disorder; cephalalgia, insomnia, night-mare, or night horror, vertigo, and a dull, drowsy headache, indicating venous stasis, are among the most frequent affections referable to secondary involvement of this system.

The *prognosis* of heart disease in the young is perhaps better than in adult life. In some instances the disease will remain stationary; the discomfort and suffering will grow less as the child grows older. This, Dr. Latham suggests, is due to a certain *protective* power possibly inherent in the *growing* heart, whereby it can accommodate its form and manner of increase to material accidents, and so repress and counteract their evil tendencies.

How often have we all heard a mother say that her child had out-grown its disease!

Again, you may find cases of heart disease in the adult that have existed from early infancy without causing any important disturbance at all.

The *treatment* of endocarditis is governed to a great extent by its cause, as you know it may be the first symptom of a rheumatic outbreak, or it may arise as a later symptom of rheumatism, scarlatina, variola, morbilli, diphtheria, erysipelas, or nephritis. The treatment must first be local: cover the præcordia with blister. Bouilland recommends the daily application of powdered digitalis leaves to the raw surface, thus keeping up the vesicant action.

Salicylic acid, or the salicylate of sodium or ammonia, can be cautiously exhibited; increasing the dose as beneficial action is observed, provided the pulse be not too frequent and the cardiac action not too violent or agitated.

The cardiac sedatives, aconite, veratrum viride, bromide of potash, and chloral, must be looked on as powerful drugs whose action will need careful and intelligent supervision.

The bromides in combination with small doses of chloral would probably meet the indications with the least possible danger.

Convallaria merits our consideration; it appears to regulate the action of the heart; this drug, however, is still on probation.

When you have somewhat controlled the cardiac manifestations, tonics are then indicated, more particularly iron in various combinations. Quinine is to be administered as soon as you discontinue the salicylic acid, and to be kept up for quite a time, even after all active symptoms have been abated.

Impending cardiac failure is to be met by cautious and judicious stimulation; digitalis, carbonate of ammonia, and camphor would all be indicated.

During convalescence, see to it that your patient is not subjected to a sudden cardiac strain in the performance of any action that will demand any circulatory effort; so select for your patients such an environment as will require of the heart the least expenditure of force. You should be particularly careful that the growing child is not constricted by clothing either around the neck, waist or limbs; the little girls should avoid compression of the chest or liver by corsets.

Salt air will be particularly beneficial to these patients. They should, if possible, pass their winters in a mild climate. They may live with benefit in moderately-elevated localities, provided of course that the patient be not necessitated to ascend and descend frequently.

Massage, in the direction of the venous circulation, is of great service as an accessory heart. It may also be employed to relieve œdema, more particularly of the lower limbs.

Medical Societies.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

(*Continued from page* 721.)

Ovarian Cystomata.

Case 1. A lady 51 years of age. The sac was aspirated, and 37 pints of typical ovarian fluid removed in February. By May the cyst had refilled and the tumor was removed. The room was heated to 80°, and a steam atomizer nebulizing carbolized water was kept in constant action. Incision 5½ inches. Bleeding points secured before opening the peritoneal cavity. No adhesions. Pedicle dropped. The sutures of silver wire used in closing the abdominal wound were inserted in such a way that the peritoneal surfaces were apposed fully three-quarters of an inch below the incised edges. The dressing consisted of adhesive strips, antiseptic gauze, absorbent cotton, and a flannel binder over all. The convalescence was pyrexical, characterized by abrupt exacerbations on the seventh and thirteenth days. Sitting up on twenty-eighth day. Recovery good. The pyrexical convalescence I attribute to the use of carbolic acid and the heat exhaustion induced by the absurd custom of maintaining a close, moist, and overheated atmosphere during the operation.

Case 2. A lady aged 51. Menopause four years ago; noticed an abdominal tumor at the time of the change. This would diminish in size during the catamenia. The past two years the suffering has been great, and while the tumor is of medium size the disturbances of the digestive functions are as great as those encountered in enormously developed cysts. Sleep for the past few months has been seriously interrupted. In

January, 1884, her health not admitting surgical procedure, and in consequence of fever and pain in the sac, aggravated by the least movement, and indicating an acute inflammatory condition, I aspirated, with the view of removing what I believed to be the determining cause of the inflammatory attack, over-distension, and also to prevent additional adhesions from forming, I withdrew eighteen pints of a dark chocolate-colored fluid, which was typically ovarian, but contained a large amount of cholesterine. The result of the aspiration was everything to be desired. The pyrexia promptly disappeared, sleep was secured, the digestive function restored, and a rapid gain of strength established. By April the sac was so filled as to again occasion constitutional disturbance, and ovariotomy was performed. This time I abandoned entirely carbolic acid and the overheated, moist, and offensive atmosphere. Strict cleanliness was observed, and corrosive sublimate used, with the atomizer remote from the patient. The temperature remained as nearly as possible at 70°. In an omental adhesion was found a large artery, which was the chief source of blood-supply to the cyst-wall. The pedicle was found to be a tendonous-like structure. The sac was almost universally adherent in the pelvic cavity, and adhesions were especially strong over the broad ligament and fundus uteri. These were so developed that it was considered by a gentleman present an impossibility to effect removal. In dealing with this complication, the fundus uteri was delivered of its thickened peritoneal covering, and the parenchyma exposed. This was the source of hemorrhage, which was stopped by dissecting up flaps on the anterior and posterior aspects, and bringing them together over the bleeding surface, and securing with six interrupted silk sutures. After removal of the sac and the introduction of the abdominal sutures, and just as I was about to close the wound, there welled up blood. The cavity was quickly re-opened, and the bleeding surface discovered after lengthening the incision to a point above the umbilicus, and well down over the pelvis. The hemorrhage originated in the separated folds of the broad ligament, and was only stopped after numerous silk ligatures had been applied; between fifty and sixty were required within the pelvis and abdominal cavities before bleeding was well controlled. Failing to secure a bleeding point in a pocket, Monsel's solution was applied. The operation occupied two hours and thirty-five minutes. One and a half pounds of ether were consumed. The temperature of the patient after the operation was over, was 94⅘°, and attention is here called to a point which is, *the determination of the degree of depression of temperature to which it is safe to subject a person during a surgical procedure.* In ovariotomy, where the securement of bleeding areas is an essential to success, the import of this bleeding can easily be appreciated; and if a definite knowledge can be established there will not be fatal cases due to septic complications, the direct result of oozing that might be prevented. Reaction was prompt. Dressing as before. Tympanites developed during the next twelve hours, and to a degree that jeopardized life. This was overcome with the faradic current, anti-ferments, and the rectal tube. There was no pyrexical complication, and recovery was without further untoward symptom.

Case 3. A young married lady, æt. 25, suffered from an ovarian tumor, which developed within a period of nine months. The cool room, absence of carbolic acid, and strict cleanliness, characterized the conditions of the operation. Corrosive sublimate was the antiseptic employed. The operation was uncomplicated, and recovery was prompt.

Dr. Goodell complimented Dr. Beates on the case requiring so many ligatures, as nothing is so demoralizing as free hemorrhage, as a complication in abdominal surgery. He criticised the ¾-inch application of peritoneal surfaces, as it is likely to fold into the wound when closing it and cause faulty union. He inquired about Dr. Beates' experience as to hernia after abdominal section. He doubted the necessity of the rule to avoid section of the recti muscles. If in inserting stitches in closing the wound good coaptation of the muscles be secured, hernia would probably be less likely to happen. He prefers silk sutures to metal ones for closing the abdominal wound as they may all be inserted, and sponges used to catch any bleeding before any of them are closed.

Dr. Montgomery remarked that some operator (name forgotten) had proposed section through the recti muscles for the express purpose of securing good coaptation and sound union. He has tried this method, and has had good results and no hernia.

Dr. Parish has used sutures through the recti muscles, and has had good results and no hernia. He uses silk, and has not been troubled with suppuration along the suture tracks.

The President thinks that if an operator once uses silk sutures he will not again use silver wire. In the case he reported this evening, the incision was necessarily through a recti muscle. He had perfect union and no suppuration.

Dr. Beates had never had a hernia resulting from abdominal section. In the second case, violent retching and vomiting caused him great anxiety, but the sutures held firmly and union was firm throughout. In the second and third cases, silk sutures were used, but pus was formed in their tracks in six or seven days.

Dr. Goodell exhibited specimens of

Papillary Ovarian Cysts,

removed from three women, with the following history: The first one had been removed on March 29, at the University Hospital, from a woman who had borne two children by her first husband, but had not conceived since her second marriage, seven years ago. The cyst was of the right ovary, weighed about twenty pounds, and its lower portion had to be enucleated from the broad ligament which overlapped it. It had burst a few hours before the operation, and the abdomen was filled with dark, syrupy fluid. The special point of interest was the papillary growths found in large numbers, both on the inside and the outside of the cyst wall. The broad ligament and pelvic peritoneum was also studded with them, and the left ovary, otherwise healthy, was so bound down and enveloped with them as to make its removal impossible. The woman's convalescence was un-

interrupted, yet Dr. Goodell could not but believe in the malignancy of the cyst, and he was disposed to attribute the diffused patches of papillomata to infection from some previous rupture of the cyst wall, of which, however, there was no history.

The next two cases were operated on at his private hospital on the same day, April 12, and both did well. In each one both ovaries were affected with intra-extra-mural papillary growths, while in one of them the right cyst had evidently burst some weeks previously, as the abdomen contained a dirty fluid, and apart from the history of sudden abdominal pain the ovary was represented by a mass of papillomata about the size of one's fist, around the base of which were the remains of the cyst wall. These two cases he deemed benign because there seemed to be no infection outside of the ovary. They were probably cases in which the cystic degeneration began at the hilus of the ovary.

President remarked that these growths were found in almost all small ovarian cysts, especially when they were enveloped in the broad ligament. They are not malignant, but are of very rapid growth, and are accompanied by pain and local congestion.

Dr. Parish in one of his patients had found an ovarian tumor as large as a man's head. The other ovary was the size of a hen's egg, and its walls had undergone calcareous degeneration; the pedicle was short and calcareous suppuration followed its removal, and a fistulous opening was left, probably depending on the presence of the calcareous matter.

Dr. Goodell also exhibited a calculus weighing over one and a half ounces, which he had removed a week ago. The lady was seventy-four years old, and was also aphasic and paralyzed from a stroke of apoplexy received five years previously. Ether was therefore given with extreme caution, and fortunately no bad results followed its use. Finding the stone to be a very large one, Dr. Goodell decided not to crush it, but to remove it by lithotomy. This was accordingly done, but a good deal of difficulty was experienced in coaxing the stone through the opening. On account of the cystitis present, the opening into the bladder was left unclosed, except at three points, where sutures were introduced merely to stop troublesome hemorrhage. The relief was immediate and the convalescence uninterrupted.

On the Use of Obstetrical Forceps as a Speculum and Protector to the Vagina in Operations upon the Fœtus in Utero, by Drs. Jos. Price and G. G. Faught,

read by Dr. Beates.

Even a casual observance of the records of gynecology shows them to be scored over and over again with cases, the sad history of which is the result of the reckless and unintelligent use of the obstetric forceps. The late Dr. John S. Parry gives the mortality of ovariotomy as 37½ per cent. According to Dr. D. H. Agnew, *Surgery, Vol. 2, page 821*, "a fatality quite as great as that resulting from Cæsarian Section." As a careful perusal of the writings of Schroeder, Tait and others shows how often this operation, when styled "unsuccessfully done," is followed by genital fistulæ, extensive sloughing and cicatricial tissue we have good reason to believe that mutilations and contusions of the soft parts are no mean factors in accounting for the heavy mortality. Foreign reports indicate that the mortality is much greater abroad than in this city. A late Irish obstetrician reports six consecutive deaths after craniotomy. Though the conventionalities and artificial modes of living in the large cities of America might necessitate the more frequent performance of serious operations in child-birth, the more successful results must be attributed to the generally conservative teachings of our schools with reference to manipulations in deformed pelves. It is to be regretted that exceptions to such teaching exist. A celebrated New York teacher, who boasts "three thousand cases and a year at Vienna," records one of his cases in which the cephalotribe slipped eight times, the operation being completed with a blunt hook. Cases are known in which the cervix has been entirely cut away, and in which in trephining the base of the child's skull the mother's sacrum has been sawn into. With such records before them, the writers feel that no apology is needed for presenting for the discussion of this Society a new and wise use for the forceps, as a protector of the soft parts, and for fixation of the head during operations upon the fœtus. A justly celebrated writer and teacher of this city, after the publication of a paper advocating this measure in the *Medical News, August* 2, 1884, called attention to the fact that the idea was not a new one, as shown by an extract from *Blundell's Principles and Practice of Obstetrics*, published in 1834. The writers are well aware that obstetrical works report cases in which the head was perforated after ineffectual traction had been made with the forceps, without recovering that instrument, and the delivery subsequently accomplished safely, *Hodge Syst. Obst., pages* 252, 272, etc. The use of these previously reported cases was however clearly accidental. Indeed, the profession seems to have lost sight of the fact that the primal use of the speculum was to enable the operator to use craniotomy instruments safely and expeditiously, Abulcaris so using it in the eleventh century (quoted by Schroeder). The design of this paper is to claim the *intentional* use of forceps as a protector of the soft parts of the mother, and for fixation of the head. The only previous intentional use of the forceps in such manner, known to the writers, was some years ago, by Dr. De Forest Willard, a member of this Society. In using the forceps after the manner referred to in the title, when the destruction of the fœtus is clearly indicated, a pair of forceps as wide in the blades as the diameter of the pelvis will permit, are applied in the ordinary way, and used for fixation and compression of the head, while the vault is being perforated and broken or folded up—the retraction of the tissues by the instrument allowing safe and expeditious work. If preferred by the operator, the blades may be separated to their respective sides of the pelvis and held by assistants, recrossing and locking them to make compression and traction. To represent the utility of the forceps under such circumstances we cite the following cases:

Case 1. M. B., æt. 21, primipara, pelvis of masculine type, child's head unusually ossified, and

its dimensions large, absolutely and relatively. When Dr. Price saw her, she had been in labor for a long period. As the pregnancy was illegitimate, she had attempted to conceal the fact that she was in labor. The child was dead; the hand was presenting at the vulvar orifice, which was very much swollen, and the woman's vital force was failing. The hand and arm were returned to the uterine cavity, and the head brought into position. As there was no expulsive effort whatever, the forceps were applied. Traction failed to engage the head. The safety of the mother demanded prompt removal of the child. Without removing the forceps, craniotomy was quickly performed after the method described, the mother's soft parts were entirely uninjured, and the woman made a prompt and satisfactary recovery. It seems hardly necessary to state that version was not attempted in this case, because it was believed that the safety of the mother would be greatly compromised by turning and dragging through contracted and inflamed tissues a large still child.

Case 2. Mrs. D., æt. 28, second labor. The first labor, two years previously, had been a protracted forceps delivery. The present labor was seen in consultation; it was a summit presentation, and various forceps had been already unsuccessfully appplied. A further attempt by Dr. Price was equally unsuccessful in causing the head to engage, its diameters being at least an inch greater than those of the pelvic outlet. The forceps being *in situ*, a large male fœtus was removed, after perforating and crushing the head. The patient's recovery was all that could be desired. She has since borne a normal child, the labor being easy.

Case 3. A. G., æt. 22, primipara, extreme angular curvature of the spine and pelvis much narrowed in the conjugate diameter. The head presented; the occiput was posterior and unengaged. Dr. Faught applied the Davis forceps, but was unable to change or engage the head. After a consultation with Drs. Hampton and Price, in which ovariotomy was decided upon, a pair of Hodge forceps were applied, the blades separated to their respective sides of the pelvis, and used as a speculum, etc., during the subsequent operative procedure. Except for a slight tear of the perinæum, which afterwards healed perfectly without the use of stitches, made by the passage of the shoulders, the patient's recovery was uninterrupted and satisfactory. In this patient the undeveloped condition of the soft and the narrowness of the bony outlet would have rendered ovariotomy by the old method a hazardous operation.

Without wearying you by further statistics, we may say that similar successful results have been attained in all our other cases, numbering four. The Hodge and Davis forceps were used in five of the operations; in the last two a special forceps, designed by Dr. Price, and made for him by Mr. Kolbe, having the following peculiarities:

1. Thin flat blades, one and three-quarter inches wide, to allow easy application in markedly deformed pelves.

2. The Hodge angulation, for use at the superior strait.

3. The absence of fenestræ, to increase the strength of the blades for powerful compression and traction, and to afford more ample protection in operative procedure during perforation, etc.

4. A greater cephalic curve, so that the points come in apposition, to prevent slipping.

5. A screw at the end of the handles, to cause greater depression than could otherwise be exerted.

Dr. Beates also exhibited another pair of forceps designed by Dr. Price, one blade of which terminated in a thin, flat, sharp-pointed perforator. This was covered with a leather shield, to protect the soft parts during its introduction. This shield is not removed, but the perforator cuts through it when it is pressed firmly against the fœtal cranium. The other blades terminate in a blunt screw, which is intended to be screwed into the spinal canal of the child for traction.

Dr. W. H. Parish reported an

Alexander Operation.

In December, 1881, Dr. William Alexander, of the Liverpool Parish Infirmary, performed for the first time what is now known as the Alexander operation. His patient had a retro-flexed and prolapsed uterus and a cystocele. He effected a permanent replacement of the uterus, but did not get rid of the cystocele. In 1884, he published his book on "The Treatment of Backward Displacements of the Uterus, and of Prolapsus-Uteri, by the New Methods of Shortening the Round Ligaments." He then reports twenty-two cases operated on by himself, and other cases operated on by other surgeons. The conditions warranting the operation—conditions which the operation is expected to relieve—are posterior displacements, retro-flexion or retro-version of the uterus. The operation is of little service in prolapse unaccompanied by either posterior displacement. It does not remedy a cystocele or a rectocele; neither does it take the place of an operation for remedying a laceration of a perineum. The operation, as recommended by Dr. Alexander, consists in making an incision down upon the external abdominal rings, finding and seizing the ends of the round ligaments, drawing them out until taut, the uterus being at the time held in a position of ante-version by means of a sound in its cavity. The ligaments are then stitched in their taut condition to the columns of the rings, and the uterus kept from dragging too greatly on the round ligaments during the subsequent two months, by means of a Hodge pessary, sometimes aided by a stem pessary. The abdominal incision heals generally by granulation, rarely by first intention. The relief of the uterus displacement in most of the cases reported, seemed permanent, or at least the displacement had not recovered up to date of publication. The operation is a bloodless one, or nearly so, the dangers are trifling, and the results in favorable cases were satisfactory in the hands of Dr. Alexander and other English operators. On December 30, 1884, I did the Alexander operation on a patient in the Philadelphia Hospital. Her general condition was not very favorable for any operation. She was about 40 years of age, of small stature and in a debilitated condition. She suffered with a chronic bronchitis, the uterus was in a condition of retroflexion and retro-version, and was also so prolapsed as to approach ordinarily the vaginal out-

let; and when engaged in severe labor protruded, according to the patient's statement; but the latter statement may have been erroneous, as there was a rectocele of about the size of a hen's egg. There was also an old laceration of the perineum, one that extended nearly into the rectum. I performed the Alexander operation because of the posterior displacement. I did not expect to remedy, except to limited extent, the prolapse of the uterus, or at all to get rid of the rectocele. I expected that a subsequent operation would be performed for the restoration of the perineum. After cutting down upon the right external ring, I found no difficulty in recognizing the terminal portion of the round ligament, or in causing it to run through the canal when drawn upon by the finger; it was about the size of a crow-quill, and did not suggest strength; it appeared in a condition of atrophy from the stretching to which it had long been subjected. The left ligament was also easily recognized, but it would not run through the canal. It could not be drawn out, and doubtless was adherent to the canal, and also held in the pelvis by abnormal adhesions dependent upon a pelvic cellulitis of old date. The right ligament was drawn out about two inches and cut off. The left one was shortened about half an inch. While the ligaments were being drawn out, the uterus was held entirely in the median line by means of a uterine sound. The sound ligaments were then stitched to the columns of the rings, and the abdominal incision closed with silver wire and covered with iodoform dry dressing. A Hodge pessary was introduced, and patient placed in bed in dorsal recumbency, with thigh flexed. The bronchitis was aggravated by the ether, and severe coughing became very troublesome. The concussion of the coughing would at times force out the pessary. The abdominal adhesions healed in about three days by granulation, after limited erysipelas had appeared. The erysipelas was not severe, and was probably dependent upon hospital influences. The posterior displacements were partially relieved, but I do not think the benefit secured to the patient amounted to a great deal. I have seen but one other Alexander operation reported in this country. I think the value of the operation should be tested. I am not enthusiastic in its favor, but am willing to give it a trial. Certainly it is not difficult; perhaps the chief difficulty consists in recognizing the round ligaments, but they are more easily found in the living than in the cadaver. There is no danger of hemorrhage, and apparently no danger of traumautic peritonitis. Probably the only source of danger is from septic infection, and this, under favorable surroundings, could scarcely occur.

The president thinks that the operation will find many cases in which it will be valuable, for instance, cases of retro-flexion without adhesions, and in which the pessary will get into the angle of the flexion and lose its usefulness, and in which a stem will not say. It will be less dangerous than Tait's plan of laparotomy and stitching the uterus to the abdominal wound.

Dr. Parrish remarked that Dr. Alexander recommended that both round ligaments should be drawn out before either of them were stitched. He recommends it for such cases as the president describes, but does not limit its usefulness to such. He also thinks it will prove a valuable auxiliary previous to operations for the cure of rectocele, cystocele, and lacerated perineum.

W. H. H. Githens, Secretary.

2033 *Spruce St., Phila., Pa.*

Editorial Department.

Periscope.

Treatment of Defective Teeth During Pregnancy.

Dr. C. A. Marvin thus writes in the *Independent Practitioner*, March, 1885:

It may cause a smile of incredulity when I say that the answer not infrequently given to the question embodied in the title of this paper is: "Treat them, as at any other time, with care and thoroughness."

"With care," certainly; "as at any other time," by no means.

I fancy many a dentist can recall instances where the unusual nervousness of a lady patient, under operations not at all formidable nor apparently severe, has surprised and, perhaps, annoyed him exceedingly. Operations, which before had been borne without a murmur, now cause intense suffering, and the ordinarily quiet, self-possessed patient, whom it was easy and pleasant to work for, has become transformed into a restless sufferer, whose outcries and contortions make a strain upon his sympathies, as well as his patience, almost too severe for him to bear.

If this experience occur to him early in his professional life, he finds it puzzling in the extreme. Unable to account for the extraordinary sensitiveness of teeth which he had operated on at other times without difficulty, he concludes, perhaps, that it is all a whim, that his patient is foolishly timid, has lost her self-control, and is making unnecessary trouble. The result of such a conclusion is not favorable to gentleness of speech or of digital exercise. Now, it may be that great injustice is done to the patient by such a conclusion, and that an injury is inflcted as well upon the dentist's reputation. His power of judgment may suffer also, and hence a trinity of evil results proceed from an erroneous opinion.

An intimate knowledge of the lady's real condition of mind and body might reveal a state of things quite startling to the dentist. For instance, he might discover that her mind was entirely free from whims; that there was a resolution to endure, which, all things considered, was

simply heroic; that the tax and drain upon her nervous force were beyond all former measure; that the suffering she manifested was real and of a peculiar acuteness, too much for her quiet endurance, and only to be tolerated through sheer strength of will, never before required of her. While nature shrank, will persisted, and, in reality, the woman was more a heroine twice told than when on former occasions she sat patiently and uncomplainingly through long and complicated operations. Her nervous system was then in repose, it is now in a state of agitation; then she only suffered fatigue, now agony. She is really taxing herself to the utmost to bear, without resistance and without murmuring, the necessary operations. The struggle is terrible, and she will be wearied and limp for hours as a result. No word of harshness or impatience should add to her already heavy burden. She realizes, as no dentist can, what her conditions and her experiences are. She can hardly restrain the flood of her tears, both on account of the pain and of her inability to bear it. A woman has a pride of fortitude as well as of beauty, and when it succumbs one may be sure the power to which it bows has no merely imaginary existence. It is real.

If this be her condition, how cruel to add another sting in the form of a severe word or an impatient gesture! Now is the time for the dentist to exercise his magnetic force, if he has any, and, by the steady equipoise of his own nervous energy, influence his patient, gradually reducing her agitation to quietness, or strengthening her by that mysterious transmission of nervous force which, though inexplicable, has been too often realized to be discredited.

So will he be better able to do his work; so will his patient be better able to endure it; so will he learn to exercise an influence, to exert a power which will be of essential service to him all through his professional life; and so will he win the gratitude of the delicate, nervous lady under his hands, and gain a life-long advocate.

But what of this hypersensitive condition of the teeth? And this unusual nervousness of the lady? And the severe struggle which is going on within her, as has been described? What of it all? Why is it?

The patient has entered upon the period of pregnancy, and the period and the state are pregnant of peculiar experiences and phenomenal manifestations.

A wonderful work of nature is begun. It is the most important, the most trying, the most delicate that the human body is ever called on to undertake. A new living being is to be formed, carried, nourished, and finally born. In its miniature form it is still to be supplied with all the organs of the mature body—all delicate tissues, all the intricate machinery necessary for the reception and transmission of sensation, for the exercise of functions necessary to the maintenance of life, when that life and the responsibility of preserving it shall have become an independent obligation.

Now, however, this new life is dependent entirely upon the mother. From her it draws its nourishment, from her life its life is sustained, and, as may readily be inferred, the drain upon her is severe. Not alone must she supply the pabulum which the embryonic bony tissues require for their growing solidity, and the muscular tissues for their toughening and development, and the digestive apparatus for its appropriate qualifications for a specific duty, but also the circulatory and nervous systems for their ready action and faithful service. Her nature is tapped, so to speak, in every energy, that the new and dependent life which she carries and nourishes may be supplied. And there is no consideration for her moods or conditions in this new life. Its demands are exacting, imperious, unintermitted. Be she sick or well, cheerful or depressed, fresh or wearied, wakeful or drowsy, the drain is never relaxed, and disregard of its demands is impossible. Her fate is upon her; she can neither escape it nor overcome it. During all the period which nature has fixed for the completion of fœtal life, the mother is a slave to her unborn child.

Besides the draft upon the physical energies, there is another as constant and even more taxing, viz: the drain upon the nervous energy.

If there be a disturbance in any part of the body, notice of its existence and extent is immediately conveyed to the sentiency—the brain's vital tenant—by the alert nerve messengers, which are by no means mere instruments of transmission, or sentinels set to watch and report any damage sustained by any part, but are themselves prime sufferers, and send intelligence to headquarters of their own hurt, as well as of injury to their neighbors. Hence, the report is immediate and reliable. The disturbed part calls for relief, and keeps calling. The system of lines of communication is actively exercised, for the lines are kept busy. This order of affairs is universal and well understood.*

Now, take the case we are considering, of the pregnant woman. That there is considerable of a disturbance in a very delicate portion of the body no one will question. And there is good reason for such disturbance. The presence of a mass of matter to which the organ is unaccustomed is no slight thing. It occupies space; it is constantly growing, and, as it grows, it encroaches more and more upon nerves, blood-vessels, adjacent organs, displacing, distending, disturbing and making the whole vicinity uncomfortable. Here is a tax upon the strength and the patience which must be experienced to be appreciated. Added to this is the constant feeling of solicitude lest harm should come, through accident, to the burdened woman; and, still further on, an intensity of solicitude, begotten of a new-born love for the living burden, lest harm should come to it, her forming child. What wonder that the woman is wearied with her burden, made uncomfortable, by the crowding of every adjacent part by the intruder, worn with constant anxiety? What wonder that the steady disturbance taxes and drains the nervous energy? What wonder if the equipoise of nervous and muscular and digestive systems is deranged or kept in so critical a situation that the slightest untoward influence will derange it?

And if deranged, and these connected systems, delicate each in itself, and composing a marvelously complex machine when united, are out of harmony, the one with the other, what a Pan-

dora's box of ills the pelvic region becomes, while an equally direful condition of things exists in the abdominal and thoracic regions! The avenues of communication with the brain are crowded with complaining suppliants, and the presiding genius is overwhelmed with appeals for help and cries of distress.

So then, this distressful condition of things must be averted, and not invited. And many a female comes into the dentist's hands at a crisis when these two alternatives present themselves for his consideration. If he be unwise in his decision and his manipulation, he invites the sad consequences before described; if he be wise and prudent, he may do much to avert them. A woman in pregnancy should be guarded carefully from disturbing occurrences or disturbing thoughts. Anxiety, apprehension—in a word, *worry*—should be kept from assailing her. Her own excited imagination will conjure up enough ills, without their phantom columns being reinforced by real evils. Keep the real ones away, and aid in dispelling the phantoms, if you would do a pregnant woman the greatest service.

Has not enough been said to indicate the kind of treatment the teeth of such a patient should receive at our hands? I will name it temporizing preventive treatment—treatment for the prevention of further damage for the time being. That is just it.

There are cavities possibly in such a mouth, which the dentist could fill permanently and without much pain. Whether it is wise or not to do so will depend largely upon the temperament of the patient. A phlegmatic individual might sit through the necessary appointments and escape all harm, and be loudest in her persuasions to her shrinking sister of a nervous temperament to pluck up courage and do likewise.

Indeed, the hardships which some women will endure, even when in an advanced stage of pregnancy, and endure them day after day, are simply appalling. And in many such cases, also, the offspring does not seem to have been injuriously affected. The child is born in due time, is well formed, hardy, and perfect. That such instances are to be found does not weaken the argument before made that, during this period, women should be spared anxiety and nervous excitement. There is a wide difference between nervous excitement and physical or muscular weariness. The women who can bear the hardships without harm, are not the women who are easily susceptible to nervous disturbance. They are strong, hardy, unimaginative, self-reliant women. They may have strong passions, but are not nervous. Or, if they are to some degree susceptible to nervous disturbance, they can still incur muscular weariness without necessarily suffering nervous prostration or excitement. On the contrary, a moderate degree of physical exercise, even to the extent of slight fatigue, is doubtless beneficial both to the mother and her child. But if these same strong, hardy women *should* receive a nervous shock, or experience an over-drain on their nervous energy, the result would be disastrous. It is not easy to produce such a shock on such women; certainly not easy enough for the ordinary and even extraordinary events of common life to effect it. It is not that they are differently made, nor subject to different laws, nor unaffected by the same laws; it is simply harder to touch the key-board of their nervous mechanism. It is encased within non-conducting walls, and the person is, so to speak, iron clad.

Now, naval officers do not instruct their gunners to open fire upon an iron-clad vessel just because she is iron-clad, and can, perhaps, stand it without injury. So, unless some extraordinary reason exists for performing at once the dental operations required by such a patient, it seems higher wisdom to hold to the rule and do only temporary work. Cavities sufficiently prepared to receive and retain protecting gutta-percha fillings; gentle manipulation of the mouth through the whole sitting; avoidance of such methods, materials, appliances, as seriously irritate the nervous system; a pleasant and hopeful view of the case; an encouraging word as to the condition of the teeth, their safety for months to come, their reduced sensitiveness when ready for permanent fillings—all these details enter into the proper treatment of patient and teeth at such a period.

If it is an important condition of the most successful operations upon the teeth, that the patient—any patient—be in a quiet and equable frame of mind during their performance, as it most certainly is, then every consideration of welfare of patient, excellence of operation, and comfort of operator, would emphasize the propriety of performing only temporary dental operations for persons disqualified for preserving equability of mind and equipoise of nerve, by reason of a great demand made upon all their vital forces by nature.

It is the physician's duty to assist nature. It is the dentist's duty also. He can assist her, and he can incommode her. He can outrage her. He can mar, perhaps destroy, her beautiful designs. Neither is it necessary that it be his intention to do so. He can accomplish so evil a result as surely by ignorance, by thoughtlessness. Unwise operations during pregnancy may result in premature birth, or a weak, unbalanced, blighted child, peevish, morbidly timid, dyspeptic in earliest infancy, giving poor promise of brightness in time to come; and this fact is a severer burden upon the mother's heart and hands than even the growing child in fœtal life was to her weary body.

But some one may ask: "If these things are so, would it not be wisest of all to postpone any operation upon the teeth till after the period is over and the patient restored?" I answer, unfortunately, decay will not wait for you. It steadily progresses, and generally progresses more rapidly in such a period. There is a perceptible lowering of tone as well as quickening of sensibility in the dental tissue. The one condition invites attack, even advancing to meet it; the other reduces the ability to resist or endure its injury. So then, if the teeth are neglected there is great danger that some of them may be lost or seriously damaged by the delay. They must have attention, and the kind of attention advocated in this paper seems best calculated to insure the welfare of the teeth, as well as the welfare of the pregnant patient. For the teeth are specially sensitive; they are reduced in tone; there is a loss of vigor; an element of health is wanting; in a word, they are not as able to bear kindly thorough operations,

and escape the troop of ills that lie in wait for a weak tooth after it has undergone a severe operation.

Sensitiveness to cold, or, what is worse, hot drinks or air, soreness to the touch, elongation, looseness, death of the pulp, ulceration—you know them all, gentlemen; these all, in their order, are waiting to rush in and occupy the territory, if only they are given the opportunity. A good, healthy tooth defies them, when a weak one cannot successfully oppose their entrance. Now a defective tooth in the mouth of a pregnant woman of nervous temperament, is a delicate thing to handle if one would reap good results. Better a hundred times treat it delicately and temporarily than to take a risk so great. Both sides of the argument are in favor of this decision. A temporary filling will preserve the tooth as well as any other for the time being, and it cannot do any harm. Even if the tooth could be treated permanently without danger, no harm is done it by the temporary treatment. The tooth is saved, and can be permanently filled at a future time just as well as now; the patient is relieved both from anxiety and suffering, and everybody is happy.

But another point calls for consideration. Suppose such a patient has teeth with exposed pulps, or with dead and putrefying pulps, or has an alveolar abscess; how in such a case? In the first place, may a kind Providence spare every pregnant woman from such a sad experience. Secondly, if such cases must be, may the same kind Providence spare any of our patients from getting in such a condition. Thirdly, if this cannot be, take the case in hand and treat it as delicately as possible. Remedies for temporary relief are on the shelves of our medicine cases; use them. If unsuccessful, the best judgment must be exercised, and the two sides of the question carefully weighed. Which will be worse in its effect upon the patient; protracted suffering or such an operation as will be effectual? When consultation is had and a decision is reached, if accepted by the patient, let the dentist proceed to execute it calmly, cheerfully, and with a vivid sense of responsibility, regarding the necessity as not of his creation, and holding it to be his mission mercifully to relieve the sufferer thus thrust into his hands.

Such is wisdom; such is the dentist's duty; such responsibility must he take. In all such cases it is important that the dentist and the physician should consult freely, that the patient may receive the best services as the result of their combined wisdom.

I need only add that in order to make such consultations agreeable and profitable, it is necessary that dentists study carefully and become familiar with this department of physiology, that physicians who are supposed to be thoroughly versed therein may recognize and admit the wisdom of their suggestions, and no time be lost in the endeavor to create confidence or overcome opposition arising from an adverse judgment of the dentist's competency to give advice.

—A Cremation Society has been organized in Buffalo.

Treatment of Ulceration of the Bowels in Young Infants.

Dr. F. P. Atkinson thus writes in the *Practitioner*, April, 1885:

It cannot, I think, be questioned that speedier and more accurate information as regards the effect of remedies may often be gained from the study of chronic than of acute disease, inasmuch as the same symptoms are apt to recur again and again, and the same remedies can be put to oft-repeated tests. The following case, which I have ventured to report, has given me an amount of information it might otherwise have taken years to obtain, and possibly it may prove of service to others who have cases of a like nature under their care. According to the mother's statement the child in question had been given up by more than one physician, and I must say myself it was one of the worst cases I have ever seen recover. At the time the little one came under my charge she was two years and eight months old. She was a perfect skeleton and quite unable to sit up in the nurse's arms. She had a sallow waxy appearance, without a particle of color about her face except a slight hectic flush upon her cheeks. She was sick whenever she took food, which consisted entirely of milk and lime-water. The bowels were moved about every four hours and the smell was perfectly unbearable. The stools consisted almost entirely of slime and pus, streaked with blood, and adhering to the bottom of the chamber-vessel even when it was held upside down. The stomach was slightly distended and tender. The previous history was as follows:

She was always rather sick from birth, but was worse after she was one year old. Had an attack of diarrhœa at eight months, and the urine was discolored (so the nurse says) with blood. She has always been troubled with diarrhœa on and off since. The stools were at first very large in quantity, and semi-solid, but not slimy. When the diarrhœa was at its worst, the actions occurred about every two hours, but the usual number of times was about once every four hours. The stomach was always more or less tender and distended. At twelve months old, she had pains in the joints, and one knee had to be put up in a splint; both legs were much swollen. The father had had syphilis before his marriage, but was said to be perfectly well when this took place. The child was nursed for about four months, but occasionally had a bottle of Swiss milk, then on account of sickness was fed entirely on Swiss milk and Savory and Moore's food for infants till twelve months old, then all kinds of milk were tried, goat's, ass's, etc., and subsequently farinaceous food, with a little Brand's essence of beef. When I saw her she was taking cow's milk and lime-water, and this was in great measure brought up as soon as it was taken into the stomach.

The indications for treatment appeared to me to give a light and easily digestible food, moreover one which after digestion would leave as little waste material as possible, to soothe the irritation of the bowels, and to improve the condition of the blood. As a diet, therefore, I ordered two tablespoonfuls of whey, two tablespoonfuls of barley-water, and one tablespoonful of cream to be taken at each feeding, and in the course of

twenty-four hours I found she managed to dispose of half a pint of barley-water, half a pint of whey, a quarter of a pint of cream, together with, later on, one and a half ounces of milk. She also took in the twenty four hours the white of four eggs beaten up in water, four teaspoonfuls of Brand's liquid essence of beef, and two ounces of finely-minced raw meat. I ordered the body to to be thoroughly oiled night and morning, the loins and stomach to be kept warm with a flannel bandage, and the feet to be well wrapped up. In order to alter the character and frequency of the secretions, I gave three times daily a mixture consisting of the following: one minim of solution of potash; eight minims of castor oil; three-quarters of a minim of tincture of opium; twenty minims of syrup of ginger, and half a drachm of mucilage. Then when the pus and slime began to pass away, and the bowels appeared simply relaxed, I gave two grains of bicarbonate of soda; three grains of subcarbonate of bismuth; half a minim of tincture of opium; five minims of tincture of catechu; two minims of tincture of rhubarb; five minims of compound tincture of cardamoms, with a little syrup and mucilage every four hours. Next, in order to improve the condition of the blood as soon as the secretions began to improve, I ordered ten minims of the concentrated syrup of the lactophosphate of lime and iron to be given in water three times daily.

The child was ordered from the start to get plenty of fresh air provided it was dry, and the rooms in which the child lived and slept were requested to be kept quite dry, and at the same time thoroughly clean and ventilated. In the course of about one and a-half years the child under this treatment made a good recovery and was able to run about by herself and eat the same as any other child. The vomiting ceased almost entirely from the time that the milk was given up. Whenever the secretions became purulent and slimy, the castor oil and laudanum mixture was resorted to, and the carminative and astringent one when the bowels were simply a little relaxed. The castor oil and laudanum was successful in altering the character of the secretions not simply once or twice, but on several occasions, and I have applied it since in other cases with uniform success. As regards the lactophosphates, I cannot speak too highly of them in aiding the subsequent recovery.

The Treatment of Carbuncle Without Incision.

In the course of the paper on this subject before the American Medical Association, by Dr. L. Duncan Bulkley (*Med. News*, May 9, 1885), the author related the case of a gentleman, aged 56, large and florid, who suffered for several years with eczema of the left foot. He was also diabetic. Following upon this eruption was a large carbuncle. He applied to this tumor, thickly spread on the woolen side of lint, the following ointment:

℞.	Ergot. fl. ext.,	℥ ij
	Zinci oxidi,	℥ ss
	Unguent. aq. rosæ,	℥ ij. M.

Covering this was cotton-batting, to prevent blows or injury. He was given sulphite of calcium ¼ gr. every two hours, and occasionally the following:

℞.	Magnesiæ sulphat.,	℥ iv
	Ferri sulphat.,	℥ j
	Acid. sulphurici dil.,	℥ iij
	Syr. zingiber,	℥ j
	Aquæ,	ad. ℥ iij. M.

S.—Teaspoonful in water through a tube three times daily.

At bedtime Dover's powder was administered, to give rest when required. The result of the treatment was cessation of pain, rapid resolution, and a cure, except some induration, in eighteen days. The man continued at his work.

He summed up his paper as follows:

1. Avoid any irritation, as pressure, blows, etc.
2. Avoid warmth and moisture, as in poultices.
3. Avoid incisions.
4. Do not use stimulants.
5. Protect the inflamed parts with the ointment given above. The solid extract of ergot may be used if desired. Spread the ointment at least one-third inch thick.
6. Use sulphite of calcium every two hours for its effect upon suppuration.
7. Employ good, nutritious food, and fresh air.
8. A sedative, if desired, and occasionally the laxative and refrigerant tonic as above.

The advantages are:

1. Short time required for recovery.
2. Cessation of pain.
3. No scar.
4. No operation.
5. No detention from business.

Reviews and Book Notices.

BOOK NOTICES.

Mushrooms of America, Edible and Poisonous. Edited by Julius A. Palmer, Jr., Published by L. Prang & Co., Boston.

The mushroom is so delicious and wholesome a vegetable, and grows so abundantly without cultivation in most parts of the United States, that it is almost the duty of every one who lives in the country to acquaint himself with the differences between the edible and poisonous varieties. In no way can he do this so easily and certainly as in studying beautiful and accurately-colored plates, like these in this publication of the Messrs. Prang & Co. They are strictly true to nature, and are accompanied by a description in popular language, not only pointing out the distinction between the toxic and the non-toxic species, but giving the needed directions how to cook the latter, so that they will be most welcome to the table. Physicians, especially, should be well versed in this branch of study for the number of poisonous fungi in this country is considerable, and every summer we read of cases of poisoning, not unfrequently fatal.

THE

Medical and Surgical Reporter,

A WEEKLY JOURNAL,

ISSUED EVERY SATURDAY.

D. G. BRINTON, M. D.,
JOSEPH F. EDWARDS, M. D., } EDITORS.

The terms of subscription to the serial publications of this office are as follows, payable in advance:—

Med. and Surg. Reporter (weekly), a year,	**$5.00**
Quarterly Compendium of Med. Science,	**2.50**
Reporter and Compendium.	**6.00**
Physician's Daily Pocket Record,	**1.50**
Reporter and Pocket Record,	**6.25**
Reporter, Comp. and Pocket Record,	**7.00**

For advertising terms address the office.

Marriages, Deaths, and Personals are inserted free of charge.

All letters should be addressed, and all checks and postal orders drawn to order of

D G. BRINTON, M. D.,
115 South Seventh Street,
PHILADELPHIA, PA.

THE

QUARTERLY COMPENDIUM

OF

MEDICAL SCIENCE.

The attention of our readers is especially called at this season to the ***QUARTERLY COMPENDIUM,*** which we publish.

It is, in fact, a supplement to the ***REPORTER,*** being made up of articles which have not appeared in the weekly, but yet are of value and interest to the physician.

It contains about 150 pages of reading matter in each number, and the whole four numbers, embracing 600 pages of choice material, will be sent to paid-up subscribers to the ***REPORTER*** for the very moderate price of

ONE DOLLAR,

in advance, for the year.

Address DR. D. G. BRINTON,
115 South Seventh Street,
PHILADELPHIA.

PARASITICIDES IN THE TREATMENT OF PULMONARY PHTHISIS.

Ever since the germ theory has been agitated, ever since the bacillus etiology of tuberculosis has been promulgated, practical every-day physicians have repeatedly queried whether this bacillus cannot be destroyed. They cannot see the practical utility of the discovery of the etiological factor, unless therapeutics keeps pace with it, and tells us how to combat it.

So far, in this respect, therapeutic progress has not been satisfactory.

In the *Brit. Med. Jour.*, May 23, Dr. John Edward Morgan, writing on this subject, tells us that in one of Dr. Hermann Weber's interesting Croonian Lectures on the hygienic and climatic treatment of chronic pulmonary phthisis, which have lately appeared in the *Journal*, he expresses hope that some means may eventually be discovered of destroying the bacillus and its spores, either in the air we breathe, or in our tissues, without injury to ourselves. Dr. Morgan has long thought that, if we are to contend successfully with phthisis, and set some limit to its diffusion, it is in the direction here indicated that our labors may most profitably be expended; for, as Dr. Weber further remarks, "when once the system is infected, we do not yet know of any parasite-killing remedies which, in effective doses, would not injure the host together with the parasite." The mischief, in fact, is then done; the fatal seed is sown, the bacilli are protected within the tissues and secretions of the lungs, and antiseptics are comparatively useless.

On this subject of disinfectants, in their varied bearings, much has been written of late years; some apparently coagulate albumen, others oxidize organic matter, while others, again, are fatal to the growth and increase of microzymes. Many of these substances have long been used in cases of sickness, and, in numerous instances, beneficial results have followed their adoption. But, though we are often told that antiseptic gases, sufficiently potent to destroy contagium, cannot be tolerated by the living tissues, we still know comparatively little regarding the amount of

rough usage the respiratory organs are capable of enduring, not only with impunity, but, in some cases, with apparent advantage. The information we possess on this subject is certainly scanty; still, certain facts have been recorded which tend to show that healthy lung-tissues may be beneficially influenced by the action of disinfectants, and, at times, seemingly protected from the inroads of bacilli. Whether, in such cases, these organs become so altered in their chemical composition or in their vital properties as no longer to prove a congenial soil for the growth of the parasites, or the bacilli and their spores are themselves destroyed, we have at present no means of deciding.

In confirmation of these remarks, he refers to what really may be looked upon as extended experiments on antiseptic remedies, continually and efficiently carried out in the north-western highlands and islands of Scotland. The great majority of the inhabitants of these districts unwittingly expose their lungs to an atmosphere largely charged with disinfecting fumes; thereby teaching us a useful lesson on the extraordinary tolerance of the respiratory organs to such sources of irritation. He briefly describes the mode of life of these highlanders, in so far as the construction and heating of their dwellings is concerned; as in this manner the singularly abnormal atmospheric conditions to which they are exposed may be most conveniently studied.

The houses to which he refers are known in the highlands as "bothies," and are the homes of the hardy crofters, to whose grievances public attention has of late been strongly directed. Many of them live under the same roof as their cattle, and in numerous instances the air of the dwelling reeks with the impure exhalations given off from the excretions of these joint inmates of the cabin. The primitive dwellings are warmed by a peat-fire, kept constantly burning in the centre of the floor. The luxury of a chimney is often altogether unknown. The smoke which rises from the combustion of this fuel, after thoroughly diffusing itself through every nook and corner of the building, makes its escape by a hole in a corner of the roof. Now, it may be asked, how is the health of these persons influenced by inhaling constantly, both by day and by night, such an atmosphere as this—an atmosphere so pungent that considerable irritation of the eyes and nostrils is frequently experienced by those exposed to the fumes?

Generally speaking, these highlanders are remarkably vigorous and long-lived, and singularly exempt from the ravages of tubercular phthisis. Indeed, so rare is consumption in these hovels, that he was led to investigate the causes of this immunity, upwards of twenty-five years ago, and published the results of his inquiries in an article on the "Non-Prevalence of Consumption in the Hebrides, and Along the North-western Coast of Scotland," which appeared in the *British and Foreign Medico-Chirurgical Review* for October, 1860. At that time, he visited most of the districts to which his investigations extended; and from what he saw and heard, he came to the conclusion that the comparative immunity from phthisis which these persons enjoy, is to be ascribed chiefly, at all events, to the inhalation of the peat-smoke, and the antiseptic ingredients contained therein, the tar, the creasote, and the tannin, together with various volatile oils and resins, black unctuous peat being rich in these substances. At that time nothing was known of the bacillus of Koch. It further appeared that any exemption from attacks of consumption which these highlanders enjoyed was only extended to them so long as they resided in their smoky huts. When they migrated to other parts of the country, or took up their abode in chimneyed dwellings, they often suffered like their neighbors; nor, after the lungs once became infected, was a return to the homes of their fathers followed by favorable results. The fumes of the smoky cabin then exercised no curative influence.

The inference to be drawn from these remarks is sufficiently obvious. When the bacillus has once established itself in the lungs, the time for antiseptic remedies has gone by. On the other hand, where there is merely a predisposition to phthisis, whether hereditary or acquired, where

also the climatic or social conditions for its diffusion are favorable, and where healthy persons are brought into close contact with those who are suffering from the disease, there it is reasonable to assume that disinfectants may prove of great value as prophylactics. Hence we may anticipate that, in the course of time, an efficient system of ærial fumigation will not only assist the physician in warding off disease, but may enable the surgeon also to dispense with the cumbrous appliances associated with antiseptic dressings and the steam-diffusing urn.

Notes and Comments.

Nitrogen in Urine.

Dumas' analysis is undoubtedly the most exact and reliable for the quantitative determination of the percentage of nitrogen contained in the urine, but it is a very complicated and troublesome procedure, not suited to the various duties of the practitioner. Kjeldahl sometime ago recommended a plainer method, but it has not been acknowledged as an accurate one. To decide this point, Drs. Pfluger and Bohland have recently instituted a series of (26) analyses of urine, with a view of testing the accuracy of Kjedahl's procedure (Pfluger's Archiv., xxxv., p. 454). They had come to the conclusion that it is so very near exact, that it more than answers all usual purposes of the physician. They have besides proven, that one part of K's method, which made the latter also somewhat complicated—the oxidation with permanganate of potash—may safely be omiited, as the result without it is just as reliable. For the benefit of the readers of the Med. and Surg. Rep., we publish in the following, K's procedure:

5 ctm. urine are heated with 10 ctm. English and 10 ctm. smoking sulphuric acid, until the fluid, at first black, has once more assumed a light yellow tint, a procedure usually occupying from 20 to 30 minutes. Then sodium lye is added and ammoniac is distilled off. The whole analysis, therefore, occupies scarcely half an hour. After distillation the residue is treated and weighed in the usual manner. Especially in cases of disturbed nutrition, and in those of artificial alimentation, the quantitative determination of nitrogen in the urine is a valuable aid in the treatment.

Cod-Liver Oil and Lime-Water in Scalded Throat.

Dr. H. D. Palmer very truly observes in the *Practitioner*, April, 1885, that so many little children die annually, especially amongst the poor, from drinking from the spout of a boiling teakettle, that a simple plan of treatment, which saved the life of a little child under his care a short time back, is worthy of record.

He was sent for to see Alice B., aged three, who when the mother was out of the room had attempted to drink from the spout of a boiling teakettle, which stood on a low fire-place about level with its face. She had succeeded in taking enough into her mouth to scald the throat most severely, and when he got to the house he found the little patient collapsed, livid in the face, and evidently dying from shock. The mouth was so swollen and scalded he could form no idea as to the extent of the injury to the throat. He thought the child would not recover, but determined, as it could not take food of any sort, to give it equal parts of cod-liver oil and lime-water, as much for the sake of a dressing to the injured parts as for the nourishment the oil would afford. He ordered it to be fed with a teaspoonful every hour, and from the first the beneficial effects were truly marvellous. The pain was evidently relieved by keeping the scalded surface constantly coated with this novel Carron oil, and as the child at first only swallowed with difficulty, it was longer in contact with the inflamed mucous membrane. In three days the child began to take notice, and in about a week afterwards all the distressing symptoms of difficulty of breathing, which had made him fear for its life at times, had vanished. As it improved, he added milk to its diet, and gradually reduced the oil and lime-water. It recovered completely.

Methyl Chloride as a Local Anæsthetic.

We learn from the Paris correspondent of one of our foreign exchanges that M. Tenneson has, in thirty-one cases, tested methyl chloride as a local anæsthetic. In ten cases of sciatica, the spray of chloride of methyl produced immediate and uninterrupted relief. In seven cases, the cure continued during a period which varied from seven days to three months. Twice it was necessary to make a fresh application, and the cure was then perfect. A patient who was unable to work, and had suffered for twenty-nine months, was completely relieved, except from a pain in the heel. Several fresh applications were made, and the pain eventually disappeared. Nine out of eleven cases of muscular rheumatism were

successfully treated. The pain disappeared, but muscular contraction remained. Articular rheumatism, acute and subacute, was relieved by methyl chloride; also, nodular rheumatism, and chronic rheumatism of the knee, contusion of the shoulder, stitches in the side, cases of pleurisy, tuberculosis, and pneumonia. The pneumonia was cured without any ill effects from the application of methyl chloride. Five or six seconds are sufficient; if the application be prolonged, erythema, hyperæsthesia, blisters, and superficial eschars may result. The spray should be directed obliquely, not allowed to fall perpendicularly on the cutaneous surface. After the first application, there may be ecchymosis of the skin. With female patients the application should last less than five or six seconds.

Splenic Murmur in Ague.

In some cases of intermittent fever, a peculiar intermitting murmur, greatly resembling pulsation, is heard over the enlarged spleen. This phenomenon has given rise to a great deal of dispute. Dr. S. Maissurianz (*Petersburg Med. Wochensch.*, 1882, 12,) has recently investigated the subject, and come to the conclusion that it is caused in the arteries of the spleen, the blood-wave getting into oscillation each time during systole in consequence of the soft, enlarged, and over-filled (with blood and serum) condition of the organ. M. has observed this splenic murmur, which sounds somewhat like a soft breath of air, in nine cases of intermittent fever, and it would probably be oftener met with, were it more frequently searched for. One can easily imagine that the walls of these arteries lose some of their elasticity, as the surrounding tissue loses it altogether; then the pressure of the mass is another factor, and thus the blood cannot pass through the vessels in an even flow, but is interrupted, and set into oscillations, which give rise to the peculiar bruit. In one of M.'s cases, the murmur disappeared on the third day under the use of large doses of sulphate of quinine. In most cases it is heard plainer and is more distinct during the febrile period, and it always ceases the moment the periodical seizures stop. In cases of chronic malaria, with a very moderately enlarged spleen, the bruit has never been perceived.

The Treatment of Migraine.

A typical case of this distressing and obstinate malady is well and graphically described by Dr. Alfred Drysdale in the *Practitioner* for April, 1885, who, speaking of treatment, says a drug must be administered which from its known physiological action is certain to reach the seat of the complaint. Caffeine, theine, and guarana, to a certain extent, fulfil this condition, but the ground is more accurately covered by glonoine (nitro-glycerine) and sepia. The latter he has found especially successful in mitigating an attack, though he has hitherto not yet succeeded in completely arresting one.

As a preventive, exercise regularly pushed to the point of fatigue is infallible. He has known the worst cases yield to this measure.

The prognosis is excellent; not even the most intense cases seem permanently injured by this strange malady. He has even observed that where it occurs in conjunction with phthisis, the latter has had a favorable issue.

Swallowing a Safety-Pin.

The following case, which Dr. Spencer Smyth reports in the *Brit. Med. Jour.*, May 2, 1885, is worthy of note. He says that he was called on March 16 to see a child aged three and a half years, who had swallowed, a few hours previously, a large safety-pin, an inch and a half in length. He found the child looking very pale, and somewhat frightened. The mother had given him a small quantity of castor oil, which had caused sickness, and relaxed the bowels once only. He ordered quiet, and a diet of hard-boiled eggs, biscuits, and milk, under which treatment the bowels became constipated. On the seventh day, fifteen grains of compound rhubarb powder was administered twice, bringing away, in the solid fæces, the pin, on the following day, the eighth after it had been swallowed. It was introduced into the child's mouth by the child's brother, only eighteen months old, who was playing with him, and pushed it down his throat; for a few seconds only it lodged in the gullet, causing a choky sensation. No pain was experienced at the time, nor was there any at the time it passed *per anum*. It was evidently voided lengthwise, the child straining, owing to the constipated state of the bowels.

Recovery after Fracture of the Skull.

In the *Pacific M. and S. Jour.*, April, 1885, Dr. Frisbie reports an interesting case of fracture of the skull in a boy aged eight years, who had been run over by a four-horse truck, that inflicted a scalp wound on each side of the head, and a depressed fracture of the left parietal

bone. There was considerable separation of the scalp and periosteum from the bone, as the child had been dragged for some distance. After removing a three-quarter-inch button by means of the trephine, the remaining portion of the bone regained its proper level, and the dura mater was found to be intact. The wounds were cleaned with a weak carbolic solution, the edges held in apposition by silver sutures, and dressed with compresses of absorbent cotton, and a hypnotic administered. Drainage was established by means of a small teat at the point of trephining. The patient was kept on a low diet, chiefly milk; the bowels were kept regular; and he recovered without a bad symptom, five weeks after infliction of the injury.

Treatment of Phthisis.

Before the Sheffield Medico-Chirurgical Society (February 12) Dr. Hunt read a paper on this subject. He agreed that the disease was a modern one, and pointed out that the countries most free from it were the northern and colder regions, and he strongly recommended the selection of such countries for the cure of phthisical patients. Dr. Hunt expressed himself very skeptical on all therapeutics as remedial agents, and strongly repudiated the course of certain authorities in recommending them as cures. He had extensively employed antiseptic inhalations, but without any marked success, and was disposed to rely very little upon their potency. Iodoform was another remedy that had been tried, but the results were not such as to warrant him to recommend it in the disease. Dr. Hunt closed his paper by expressing the opinion that in the future the treatment of phthisis would come more under the domain of surgery than it had ever done in the past.

Carbolic Acid in Gastric Disorders.

Dr. Spencer Smythe tells us in the *Brit. Med. Jour.*, April 18, that he has been in the habit for the last three years of giving carbolic acid, in grain doses, three times daily, for indigestion, accompanied by constant acid eructations, with pain and vomiting. He has also prescribed it in seasickness, and in the vomiting of pregnancy, with good results. It can be given with opiates, where there is much gastrodynia, after meals; also with bismuth, nux vomica, etc.; also in cases manifesting gastric ulcer. Patients suffering from flatulency have derived considerable benefit from its employment, it being more readily taken than charcoal. He considers it a valuable remedy in such cases.

Special Report.

OPHTHALMOLOGY.—NO. XVIII.

BY CHAS. S. TURNBULL, M. D.

(*Review of Transac. Am. Ophthal. Society, concluded from page* 726.)

A New Perimeter is described by Ezra Dyer, M. D., Newport, R. I. The advantages claimed for this perimeter are:

1. The entire field of vision is traversed by eccentric object from the periphery to the centre, and by reversing the motion, from centre to periphery, in two minutes, without haste. This brings an exhaustive examination of the field of vision, for the detection or exclusion of a limitation or scotoma, within the available time of any one.

2. When a limitation of the field is detected it can be very rapidly mapped out, saving time to the examiner, fatigue to the patient, and ensuring greater accuracy, as in the short time required there is little danger of a movement of the head.

3. Both objectives can be made small electric lights of from one to seven candle power at will.

With these, the sensibility of the retina can be tested quantitatively.

H. S. Schell, M. D., of Philadelphia, records "*A Case of Embolism of the Retinal Artery*," which has some features of peculiar interest. In his interesting description of the case, S. says: "In the inferior branch of the artery, just before it passed over the edge of the disc, there was a space about one-fourth of the disc's diameter in length, which was apparently empty of blood. This space included the entire calibre of the vessel, was pale in color, and motionless. Pressure upon the ball from before backward, in the manner recommended by Mauthner, so as to increase the ocular tension, emptied the veins completely, but had no effect upon the arteries. The veins refilled instantly when the pressure was removed. After massage had been practiced in this way for some minutes, a regular current of blood began to flow through the vessels. This movement was made visible by the fact that the blood-stream was broken into numerous very short cylinders, separated by about their own lengths, and following in procession, without rhythm, and with about the apparent rapidity of the blood corpuscles in the capillaries of a frog's foot, under the microscope. These little cylinders passed from the disc some distance along the arteries before they were lost sight of in the

œdematous retina, then formed again at the distal extremities of the veins back to the disc."

The next is "*A Case Illustrating the Natural History of Cataract.*" By A. Mathewson, M. D., of Brooklyn, N. Y.

Another, "*Myxo-sarcoma of the Orbit and Osteoma of the Orbit.*" By Wm. F. Norris, M. D., Philadelphia.

A "*Clinical History of a Case of Sympathetic Ophthalmia,*" graphically related by L. Webster Fox, M. D., serves to teach us an important lesson.

"On December 15, 1883, William R., æt. 12 years, whilst cutting a cord with a sharp-pointed knife, accidentally punctured his left eye in the ciliary region. The wound, which was four lines in length, and deep, was situated in the inner and lower quadrant of the ball, near the cornea. Cold applications made, and the eye bandaged. In twenty-four hours serous iritis developed, closing the pupil and obscuring vision. This condition went on from bad to worse till qualitative perception of light only remained. There was no pain, neither was the eye sensitive to light during the acute stage of the iritis. The patient was allowed his freedom during this time, and a mydriatic was not applied, nor internal treatment advised. It was thought the inflammation was due to a "cold," and would soonpass off.

On January 2, the boy was sent to school; the eye at this time still very much inflamed, but without pain, it being protected by a bandage.

On the 4th of January, he complained of a dimness obscuring his distant vision in the right eye. His mother (a poor widow) sought the aid of an ophthalmic expert, who, recognizing the gravity of the case, at once instituted vigorous treatment. The eye soon became as bad as its fellow.

On March 28, 1884, the date the patient was first seen by myself, the conditions were as follows: Left eye (injured one), cornea hazy, keratitis punctata, balloon-shaped iris, degenerated in spots, occluded pupil, sclerotic congested, slight perception of light. The cicatrix of the wound well defined. The right eye similar in appearance, excepting the pathological conditions more pronounced. On the iris, which was very much thickened, could be discerned by oblique illumination new-formed blood-vessels. There was barely qualitative perception of light. During inflammatory process, the patient suffered little or no pain; light, however, could not be borne. We could only confirm the prognosis given by the former attending physician; but as considerable inflammation, as well as inflammatory deposits, remained, we instituted mercurial treatment guarded by opium, with instillations of atropia, as well as applying leeches to temples. This treatment was forced to salivation, but did not modify the virulency of the disease.

On April 19, my friend Dr. R. B. Schulze, under whose care the patient was at this time, wrote me that hypopyon made its appearance in the right eye during the last few days; some slight supra-orbital pain. The mercurial treatment, both internally and externally, was resorted to, in small but frequent doses; the inflammation seemed to respond to the treatment, for in three days the pus disappeared, the thickened and yellowish-brown iris assumed a more normal shape and color. During the following few weeks the sclerotic congestion disappeared, becoming white. Lachrymation, which at times was profuse, now disappeared entirely, the eyes assuming a normal appearance, but vision gone.

On June 21, I saw the patient and noted the following: Right eye, all traces of inflammation gone, but atrophied to one-half its former size. No perception of light. Left eye evidently becoming atrophic, perception of light (?) in the upper field; sclerotic white.

Two Cases of Orbital Abscess, by J. A. Lippincott, M. D., Pittsburgh, Pa. Both cases are interesting.

Another peculiar and interesting paper is entitled *Experiences in Refractive Cases*, by W. W. Seeley, M. D.

Cases of Disease of the Frontal Sinus, by Charles J. Kipp, M. D., Newark, N. J.

Case 1. *Abscess of Frontal Sinus, Ethmoidal Cells, and Sphenoidol Sinus.* John Bredfelt, fifty-two years of age, in good health, consulted me in March, 1883, with regard to a double vision and pain in the head. He had suffered for many years from frontal headache, but had otherwise always enjoyed good health. A year ago he first noticed the diplopia, and since then a gradual protrusion of the eye has taken place.

I found that the left eye was pushed downward, outward, and slightly forward, the cornea of this eye staning about 1 cm. below that of the other eye. The mobility of the eye was decidedly impaired upward and inward. The eyelids were normal, except that the upper was rather fuller than that of the opposite side. Palpation discovered a nodular tumor of irregular form, which was adherent to the upper half of the inner and nearly the whole of the upper margin of the orbit. It projected about 1.5 cm. towards the

eye, and extended back in the orbit as far as the finger could reach. It felt hard and unyielding to the finger. No fluctuation could be discovered. No pulsation of the tumor could be detected. The sight of this eye was normal, and the ophthalmoicopic examination revealed no abnormality, except slight hyperæmia of the retinal veins. I supposed that the tumor was a sarcoma connected with the periosteum of the orbit, and advised removal.

The sight of the right eye was perfect; it was slightly myopic. A few days later, the patient being under ether, I made an incision along the upper margin of the orbit, exposing the tumor. I then introduced my finger to ascertain the character and extent of the tumor, and learned that it was in parts as hard as a bone. While still exploring, I felt a break in one of the hard parts of the tumor, and a moment later a considerable quantity of very fetid pus escaped from the incision. I now endeavored to ascertain the extent of the abscess by means of a probe, and found it to extend so far upward and backward that I concluded to abstain from further exploration. I made a free opening in the wall of the abscess, evacuated large quantity of offensive purulent matter, and introduced a large drainage tube into the opening. When the patient became conscious, he complained of a horrible odor in his nose, and expectorated much fetid pus. After this, the cavity was washed out daily with a warm and very weak solution of salt, some of which escaped from the nose. For ten days after the operation, the patient was apparently doing remarkably well, the eyeball had resumed its normal position, the diplopia was less, the headache had almost entirely disappeared, and the patient was entirely free from fever. But on the eleventh day he showed symptoms of pneumonia, which in spite of the most assiduous attention ended fatally on the seventeenth day after the operation. The autopsy was made on the following day by Dr. R. Stachlin, who had treated him for the pneumonia, and myself. The examination showed that the frontal sinus, the ethmoidal cells, and the sphenoidal sinus, had been converted into one large cavity, which contained some pus in its lowest part. The bony walls of the cavity were carious, and numerous sharp spiculæ of bone projected from the walls. The inner surface of the cerebral plate of the horizontal process of the frontal bone was discolored in several places, but not roughened. The dura mater over these places as well as everywhere else was normal, and the other meninges and the brain itself were apparently healthy. The floor and outer wall of the abscess consisted of very much thickened periosteum, in which a number of thin scales of bone were imbedded, and in one of these the opening was found from which the pus had escaped during the exploration. The lungs showed a simple pneumonia; there were no abscesses, and none of the other usual appearances of metastatic pneumonia.

Remarks.—The mistake made in the diagnosis of this case seems unavoidable.

The slow development of the tumor, its size, hardness and inelasticity, the irregularity of its surface, and the absence of all inflammatory symptoms, made it extremely probable that the tumor was a fibroma or sarcoma originating in the periosteum of the orbit. Fortunately, this error in diagnosis resulted in no harm to the patient, for, had I known the true character of the disease, I should have operated as I did; but I should have been more guarded in my prognosis. In no other case have I seen the bony partition between the frontal sinus, the ethmoidal cells and the sphenoidal sinus so completely destroyed as in this.

Case 2. *Distension of the Frontal Sinus. Cured by Applications to the Mucous Membrane of the Nose and Pressure of the Tumor.* Mrs. N. A. W., fifty-seven years of age, a large and healthy looking woman, consulted me with regard to a painful swelling below the left eye-brow, in October, 1882. According to her statement, she had for many years suffered almost constantly from a severe pain in the left frontal region. The tumor began to appear six months ago, and had since steadily increased in size. She had not sustained any injury to the nose or head, but had always had naso-pharyngeal catarrh. The tumor was about the size of a hickory-nut, and was immovably attached to the inner upper angle of the orbit. It extended into the orbit as far as the finger could reach. The surface of the anterior part was smooth, that of the posterior portion nodular. The tumor was quite hard, but on deep pressure fluctuation could be felt. The skin over the tumor was normal, and not adherent to the swelling. The eye-ball was pushed slightly downward and outward, and its movement upward and inward was somewhat impeded. The diplopia did not annoy the patient very much; The examination of the fundus of the eye showed nothing abnormal. With the exception of great swelling and congestion of the mucous membrane, nothing abnormal could be detected in the nose. There could be no doubt that the tumor was caused by the distension of the frontal sinus, and I therefore advised the pa-

tient to have an operation made for the purpose of establishing communication between the nose and the frontal sinus. This the patient declined to have done.

I did not see the patient again till July 21, of the following year. At this time the tumor was somewhat larger than it had been when I first saw her, but otherwise it had not changed. There was now in addition much injection and œdema of the ocular conjunctiva, and a shallow ulcer in the center of the cornea. The eye became painful several days ago, and the redness was first noticed two days before. The patient attributed the eye trouble to overheating while working in the field, and was sure that the eye had not received a traumatic injury. I prescribed fomentation with a warm solution of boracic acid, and instillations of atropia. Under this treatment the ulcer healed completely in about twenty days. While under treatment for the corneal ulcer I frequently examined the tumor, and on one of these occasions felt it to give way, and on pressing somewhat harder I evacuated the cyst almost entirely. At the same time the patient felt something exceedingly disagreeable in taste in her mouth, and expectorated a considerable quantity of very offensive, bloody muco-purulent matter. I now learned from the patient that the swelling had "broken inwardly" several times during the last few months, and the discharge had on each of these occasions been exceedingly offensive. I applied solution of nitrate of silver to the mucous membrane of the nose, and frequently washed out the nose with warm salt water, and at the same time instructed the patient to evacuate the cyst by pressure very frequently through the day. For some weeks after this the cyst refilled very quickly, and at one time an inflammation of the skin over the tumor was developed, which spread also over the right half of the forehead. Under the application of ice compresses this subsided, however, very quickly. Until the first of May, 1884, the patient was free from pain in the eye and forehead; the cyst became distended but rarely, and when it did could be emptied by slight pressure. Although always of a disagreeable taste and odor, the discharge had not been offensive for several months. The diplopia had entirely disappeared.

In the early part of May, while apparently in excellent health, she had a severe chill, followed by fever and sweating. I saw her on the following day, but could find no marked change about the frontal bone. The ophthalmoscopic examination revealed indistinctness of margin of optic disc, but no other abnormality. Quinine was given for a week, and no other paroxysm of fever occurred. Since then the patient has enjoyed excellent health. The tumor has not reappeared for many weeks, and the optic disk is again entirely normal. The skin over the inner upper margin of the orbit is somewhat thickened, but otherwise normal. The defect in the inner upper angle of the orbit is about the size of a ten-cent-piece, and its margin is markedly nodular, several of the nodules being about the size of a pea. The end of the finger can almost be pushed through the defect into the frontal sinus. The mucous membrane of the nose is still swollen, although the swelling is much less than it was six months ago. Now, it is not an uncommon occurrence for air to enter the frontal sinus and distend it when she blows her nose.

Remarks.—This case seems worth reporting, as it shows that in some cases, at least, this disease can be cured without resorting to an incision in the outer wall of the distended sinus. In nearly all of the cases that I have seen, in which the sinus was thus opened, a permanent fistula, causing much annoyance and some deformity, and any method of treatment not involving such an incision, and yet giving as good results, will, I have no doubt, be welcomed. It can certainly do no harm, if it does no good, to endeavor to cure, or at least improve, the morbid condition of the lining membrane of the nose, which will be found to be present in most, if not all, of the cases of distension of the frontal sinus. Attempts to empty the sinus through its obstructed or closed passage into the nose by digital pressure on the swelling should be made from time to time, and after the sinus has been once emptied, it should be evacuated at short intervals. If, after a fair trial of this treatment, the distension continues, the old method of treatment may be resorted to.

A Case of Glioma of the Retina (*Double Congenital*) by Wm. S. Little, M. D., of Philadelphia. It was seen in a child eight months old. He says in a case recently reported by Mr. Snell, at a meeting of the Ophthalmological Society of the United Kingdom, the mass in each eye was recognized at three months of age. Child seen by Mr. Snell when it was eight months old; the right eye was removed; three years later the left eye enucleated; eighteen months later the child died, a tumor projecting from the forehead; there was no recurrence in the orbits. The age at death was five years and two months.

Enucleation evidently prolonged life in this

case; the rejection of any surgical interference by the parents of the case reported, did not allow this to be shown, but as fatal results are reached in congenital cases, so rapidly, operation becomes almost questionable; when recognized early it is advisable. An interesting feature in this case is that while the right eye was more involved the tumors on the left side of the head were larger than the one on the right side, and yet the mass in the left eye developed very slowly, or almost remained stationary.

In two other cases seen at his clinic, in older children, and only one eye involved, the operation was refused; done, however, by another surgeon, after the eye had broken down, and fatal results soon followed.

Two Cases of Swelling of the Optic Papilla—Possibly Congenital. By George C. Harlan, M. D., Philadelphia, who says, "Though optic neuritis without impairment of the vision in its early stages is a common enough occurrence, the two cases seemed worthy of record, on account of the high degree of sight retained, and the length of time they were under observation without change in the ophthalmoscopic appearances, and without the development of any other symptom."

Two Cases in which Rählmann's Hyperbolic Lenses Improved Vision. By G. Hay, M. D., Boston, Mass. He regarded case 1 of slightly developed conical cornea, with irregular astigmatism; and case 2 pronounced conical cornea of each eye; no opacity at apex noticed.

A Case of Myxœdema with Atrophy of the Optic Nerves. By O. F. Wadsworth, M. D., Boston. It is only quite recently that the disease known as myxœdema has excited much attention; its pathology, beyond the fact that there is a deposit of mucin in the subcutaneous tissues, is still unknown; and even the symptoms observed in the cases reported have presented in some respects considerable variations. Although symptoms pointing to disturbance of the cerebral nervous system have occurred in some cases, no affection of the eyes, in particular of the optic nerves, has, so far as I am aware, been described. It may, therefore, be of interest to put on record the following case, in which there was atrophy of the optici. It may well be that the optic atrophy was only coincident, and had no direct connection with the myxœdema. Yet primary atrophy, as this evidently was, when it affects both eyes, is of comparitively seldom occurrence as an independent lesion.

A Report of the Examination of the Employees of the Pennsylvania Railroad as to Color Sense, Acuteness of Vision, and Hearing, by William Thompson, M. D., Philadelphia, Pa. An instrument for the detection of color-blindness, described in our Proceedings* of four years ago, a modification of Snellen's Letters, in the form of a disc, and a series of rules and regulations prepared by the writer, were adopted by the officers of the Pennsylvania railroad, and have been used in the examinations of their employees in signal duty, and is in use now in the selection of all men who enter the service. The road operates five thousand miles of track, situated in six different states, and has about fifty thousand employees, of whom from ten to twelve thousand have to do with signals.

Upon each of the fifty divisions there are two examiners, who are instructed by the surgical expert in their duties, their results being recorded on blanks, which contain all the information needed by the division superintendent, who can transfer to other duties men below the standard, or refer them for final examination or treatment to the surgical expert. The rules and regulations and blanks have already been published, and can be obtained from the General Manager, Mr. Chas. E. Pugh, who, in a letter dated April 20, 1884, says: "In approaching the completion of the task of examining those men in our service (more than twelve thousand employees having now been submitted to your system), I desire to express to you our entire satisfaction with the rules and regulations, tests and instructions prepared by you, as well as with the personal supervision, instruction of examiners, and examinations and decisions of all doubtful cases, and persons referred to you for final action.

"Our reports satisfy me that about four per cent of color blind, and ten per cent, defective in vision, have now been removed from the service, or transferred to other duties where they can do no injury; and that the great dangers to the public and to other employees of loss of life, and to the company of possible destruction of property, have been averted, so far as these defects are concerned.

"I am frequently asked by prominent officers of other railways, and government officials, to give an opinion as to the practical usefulness of our system of examinations, and it affords me much pleasure to emphatically commend it in all its details; and I feel that we have good reason to be satisfied with this, the first successful attempt to bring the entire body of men engaged in signaling upon a large railway under control by

*Am: Ophthal. Society.

the practical application of scientific facts. Having eliminated these dangerous persons from our present force, we propose to keep it free from them in future, by a steady application of our present system.

I will add, that so smoothly has the entire system been worked, that no change has been found necessary. The example of this, the most important road in the country, in the wise employment of scientific knowledge, can now be safely followed by others, or might be made the basis of legislation, should it be found requisite."

A Case of Acute Dacryo-adenitis. By T. R. Pooley, M. D., of New York. "Acute inflammation of the lachrymal gland is of sufficiently rare occurrence to make it worth while for this reason alone to report an additional case, but the one I am about to put on record showed another interesting feature. which makes it especially worthy of mention.

The patient, a healthy German girl of about twenty-four years.

The interesting and unusual feature in my case is the occurrence of an acute inflammation of the gland, during the course of an acute diphtheritic inflammation of the other eye, and raises the question in my mind whether it may not have been caused by septic absorption. The general health of the patient was very greatly impaired, and the slight rise of temperature may have been due to a mild septicæmia. In regard to treatment, hot applications, with the systematic use of pressure, together with incision should the abscess point, is all that is required. Although I have seen a small number of cases of chronic and sub-acute inflammation of the lachrymal gland, this is the only instance in which the case has run such an acute course."

Multiple Colobomata of the Iris, or Polycoria Congenitalis. By W. F. Mittendorf, M. D., New York. "The infrequency of this condition will, I hope, excuse me for reporting two cases of this kind. Double pupils, congenital as well as traumatic, are not rare, but five pupils in one eye are not often seen. Cuts accompany this rare anomaly."

Removal of Foreign Bodies from the Vitreous by Aid of the Electro-Magnet. By Joseph Aub, M. D., Cincinnati, O. "The cases I am about to report, are such as occurred in my practice during the past four years.

From 1875 to 1881, we had eight different times, attempted the removal of pieces of gun cap, iron or steel, from the vitreous by aid of forceps. Twice the ordinary horse-shoe magnet was called to assist in the operation. Six of the eight cases were relieved of the foreign body, but in two I utterly failed. In all cases the operation was followed by severe inflammation, and enucleation of the eye-ball had to be performed sooner or later, either by myself or some other oculist.

In 1881, after Dr. Bradford had described his electro-magnet, a case came into my hands in which it seemed to me the magnet could be advantageously used, and I immediately procured one, and used it successfully. Since then other successfully operated cases have occurred in my practice. During last fall, Hirschberg, in the *Centralblatt für Augenheilkunde*, reviewed the book of Dr. Snell, of England, "On the Use of the Electro-Magnet in the Removal of Foreign Bodies from the Eye," and in studying this review, I was exceedingly surprised at the few successful operations reported; for up to that time my cases had all been successful. My cases were such as occurred in the usual run of practice, and were not specially selected for that purpose. Since last fall I have had one case in which the electro-magnet failed to remove the foreign body, and where enucleation was subsequently performed."

A Cass of Hypermetropic Refraction, passing while under Observation into Myopia—Symptoms Simulating General Nervous Disease, reported by S. D. Risley, M. D., Philadelphia, was one of the most interesting of all the papers read, and to be understood must be read in toto, and to those interested it is well worth looking up.

CORRESPONDENCE.

Polypus of the Trachea.

EDS. MED. AND SURG. REPORTER:—

Mr. S., aged seventy-two years, consulted me last month, saying that he had been suffering with a suffocating feeling in his windpipe for the last two years, and that the difficulty of getting his breath had increased so much lately that he could scarcely breathe. He had also a large goitre, and he said that the physicians whom he had consulted thought that the difficulty of breathing was caused by the pressure of the goitre upon his windpipe. His face presented a most anxious and distressed appearance, and his speech was painful and interrupted. His respiration was of that peculiar whistling character indicating a narrowing or obstruction of the trachea. He could only breathe with the slightest ease by sitting with his elbows resting upon his knees, and was constantly harassed by a short hacking cough. He said he felt as if he would choke every moment; and it really employed all the energy of both mind and body to maintain the function of respiration. In consequence of his distress in breathing it was most difficult to get him to hold his head in a suitable position for me

to examine his larynx; but after some patience and many repeated efforts, I succeeded in getting a look at it, and found nothing there to explain the great impediment in breathing; and not suspecting the presence of a mucous polypus within the trachea, I inferred that the difficult and imperfect respiration arose from the pressure upon the trachea of the goitre, and tracheotomy was the only means that suggested itself to me as being most likely to save the old man from impending suffocation; but thinking to make a rapid impression on the goitre, I gave him five grains of iodide of postassium in a half ounce of water every hour, and ordered the goitre to be well rubbed three times a day with compound iodine ointment. Early in the morning of the third day of this treatment, the old man called his daughter, telling her that he was choking to death. As she stood by her father's side, she said she could hear something fly up and down his windpipe, and in a few moments after a violent coughing spell a fleshy body the size of a cranberry flew with great force out of his mouth and dropped into his lap, and immediately his breathing became easy and natural. She at once sent the substance to me, and I, at a glance, recognized it to be a mucous polypus with its slender pedicle attached. I cannot say that the iodine treatment had anything to do with the expulsion of the polypus, but fortunately for the old man it was expelled, and he has had no trouble with his breathing since. J. B. Johnson, M. D.

Washington City, D. C.

News and Miscellany.

Epidemic of Typhoid Fever, at Plymouth, Pennsylvania.*

Dr. E. O. Shakespeare gave a verbal report of the investigations which Dr. M. S. French and himself, at the request of the mayor, had made concerning the nature of the Plymouth epidemic.

They had reached Plymouth on Saturday night, May 9, and on Sunday had an opportunity of making a post-mortem examination on one of the patients who had died from perforation. Well-marked evidences of peritonitis were found, the point of perforation being readily seen. On opening the intestine, the characteristic lesions of typhoid fever were well-marked. The spleen and the liver were also enlarged and softened. Other post-mortems were made, showing the same condition. The clinical history of patients examined, also corresponded to typhoid fever. They had remained at Plymouth two days.

He then gave the following descriptions of the conditions under which the epidemic arose:

The town of Plymouth nine months out of the twelve is supplied with water from a mountain stream, and during seasons of drought, occurring usually three months in the year, water from the Susquehanna river is pumped directly into the mains at the lower portion of the town.

In consequence of the frozen condition of all the streams in that portion of the country surrounding Plymouth, about the 20th of last March the usual mountain source of water supply became inadequate, and, therefore, the water company began on that date to pump water from the Susquehanna directly into the mains in the lower streets of the town, while the upper streets on the hillside were still supplied from the reservoirs of the mountain stream. The pumping from the river continued until the evening of the 26th, when a sudden thaw, accompanied by slight rains, again filled the reservoirs.

During the period of pumping from the Susquehanna, the water in that river was lower than it had been for years, and the surface was frozen tight. The city of Wilkes-Barre, containing 30,000 inhabitants, delivers its sewage directly into the Susquehanna, the mouth of the lower sewer emptying only two miles above the Plymouth pumping-station, while the current is very rapid between the two towns. The water is further contaminated by refuse water from five or six mines, as well as by the garbage from the abattoirs at Wilkes-Barre. Notwithstanding this unusually filthy condition of the Susquehanna water, it is beyond question entirely innocent of causing the epidemic, for the following and other reasons:

There was less of typhoid fever in Wilkes-Barre at that time than usual. A section of Plymouth supplied exclusively by the Susquehanna water and by a few wells, containing a population of 800, is entirely free from the disease, except in the case of eight persons, five of whom, previous to their attack, had been in the habit of going into the town and drinking the mountain water, while two were recent cases of secondary infection. In other portions of the town the extent of the disease was in direct ratio to the amount of mountain water used, and averaged $\frac{1}{10}$ of the population.

The lower portion of the town was principally supplied with the river water during the time of the pumping, while the upper portion at the same time received the greatest supply of mountain water. The rate of sickness is two cases in the upper portion to one in the lower, the latter also having been partly supplied from the reservoir.

The mountain stream has four reservoirs, the lower one distributing water throughout the town. The water in all the reservoirs was nearly exhausted at the time of pumping, and they were also frozen. The mountain stream is a small one, running down over a rocky bed, and on a declivity not eighty feet from its bed a dwelling is situated, wherein, during January, February and March, was located a case of typhoid fever that is only now convalescent, the worst period of the case being about the 20th of March. The attending nurse was in the habit, during each night, of carrying the excreta from the patient and depositing it on the ground towards the stream. The ground during all this time was frozen and covered with snow, until the thaw and rain already alluded to occurred. The poisonous character of the dejecta is not destroyed by freezing, but is only kept in a state of hibernation. A great part of the three months' accumulation of dejecta was suddenly swept into the rapidly running stream, and reached the lower reservoir as quickly as a man walking fast could have arrived there.

*Reprinted from the Proceedings of the Philadelphia County Medical Society, May 13, 1885.

In fifteen days from this time the epidemic began, fifty cases occurring daily between the 10th and 20th of April. Up to the present, twelve hundred have been sick, and one hundred have died out of a population of eight thousand. For the first three weeks the few people in town who used well water exclusively escaped the disease. The period of incubation varies between ten and twenty days, or longer, and therefore no other conclusion can be arrived at, than that the infective poison existed in the mountain water, and originated from the one case of fever in the house on the side of the stream.

The doctor went on to say, that although those people who used the water from the pumps in the town escaped at first, it was now found that the new cases developed in those who use well water. This was due to constant neglect to disinfect the excreta of the patients sick with the disease. In many cases they were thrown only a few feet from the well, and in this way the well water was now becoming contaminated. The people early became afraid of the hydrant water, and were now in great numbers resorting to the wells. Therein is the danger of a continuance and further spread of the epidemic.

Notwithstanding the frightful lesson which the one case of the fever along the source of water supply had taught the doctors and the people, not one precaution against the possibility of secondary infection from the sick in Plymouth had been taken. Drs. French and Shakespeare were the first to inform the local Relief Committee and the people of their danger, and to draft for them sanitary rules looking to disinfection of the excreta, and to rendering the drinking water, milk, and food harmless. They had occupied none of their limited time in looking into the milk or other food supply, for the reason that these could not possibly have been so universally contaminated, as would have been required for them to have caused the sudden outbreak all over the town.

They regarded this Plymouth epidemic of typhoid fever as unique in many respects. It is one more proof that there is required for the production of typhoid fever something more than the mere contamination of drinking water by common sewage or fæcal matter; that, on the contrary, for the production of the specific, infectious, and altogether characteristic disease, known as typhoid fever, there must be introduced into the human organism a specific, infectious, and characteristic cause, which is elaborated by and transmitted from a previous person sick with the disease.

It is one more example of the great injury to the public which may follow neglect of the use of disinfectants in the handling of isolated cases of infectious disease, and it is one more rebuke to those who, in spite of our modern knowledge concerning the infectious nature of typhoid fever, constantly neglect the practice of systematic disinfection.

Therapeutic Aids.

Nestle's Milk Food.—We have lately had occasion to try this food in cases of chronic dyspepsia, and in infants convalescing from affections of the bowels. It has fully borne out the high character as a nutrient awarded it by European authorities, and has succeeded better than any other food tried in these cases. The food is prepared in Switzerland, and sent in fortnightly shipments to to this country. We recommend those of our readers who have occasion for such an article to try it. Any druggist can obtain it.

Florida Orange Wine.—The pure juice of the orange, fermented and aged, has been found to produce a very light, palatable wine, with a flavor like dry sherry, and admirably suited to invalids. The agents are Messrs. Huey & Christ, 1207 Market street, Philadelphia. They will send full information about it to any one mentioning the name of this journal.

Disinfectants and Antiseptics.—The most complete line of these articles, so essential to health during the summer months, that we have seen is manufactured by Messrs. Parke, Davis & Co., of Detroit. They are both fluid and solid, for fumigating, washing, and bathing. A descriptive pamphlet will be sent by the firm on application.

Corrigenda.

On page 699, seventeenth line from bottom, for 60 grains to ℥, read 60 grains to ℨ.

Items.

—Dr. Robert Koch has been officially gazetted as Professor of Hygiene in the Medical Faculty of the University of Berlin, and has been appointed "Geheimer Medicinalrath."

—The fifty-third annual meeting of the British Medical Association will be held at Cardiff on Tuesday, Wednesday, Thursday, and Friday, July 28, 29, 30, and 31, 1885.

—Dr. T. H. Wingfield died at his residence at Townsontown, Md., on March 30, in the 59th year of his age. During the war he served on the medical staff of Gen. R. E. Lee.

—At the fifty-second annual meeting of the Tennessee State Medical Society, Dr. T. L. Maddin, of Nashville, was elected President, and Memphis was chosen as the next place of meeting, the first Tuesday in April, 1886.

—The Board of Health of Boston has decided that old rags shipped from Egypt to that port with a certificate of the United States Inspector of Rags that the rags were disinfected by the sulphur process, cannot be landed except after further disinfection.

—A Medical Hygienic Congress is to take place at Buda-Pesth from September 3d to the 5th, inclusive. The following subjects are to be discussed: Mortality amongst children; sanitary administration; co operation of societies for the furtherance of hygiene; parochial sanitary matters.

Personal.

—Dr. George C. Catlett, Superintendent of the State Lunatic Asylum of Missouri, has been elected President of the Missouri State Medical Association.

DEATH.

NEWCOMET.—June 3, 1885, at St. Louis, Mo., H. W. Newcomet, M. D., of Philadelphia.

Hydrochlorate of Cocaine,

(MURIATE OF COCAINE)

The New Local Anæsthetic.

This new local Anæsthetic promises to be of great value to the Medical Profession.

In operations on the eye it appears to have a far superior effect to any anæsthetic thus far discovered. In gynæcological practice, and in operations on the ear and throat, and in dental surgery it seems to be of great value.

Drs. AGNEW, NOYES, LEFFERTS, POLK, SEILER, KNAPP, MATHEWSON, and many others speak in the highest terms of its merits, and predict for it a great future. Dr. CHARLES S. BULL says: "Looked at even from the most unsatisfactory standpoint, and without the glamor of a very excusable enthusiasm, the drug is a most valuable addition to the resources of ophthalmic surgeons."

Dr. HOWE and Dr. BADER (*London Lancet*, Nov. 22) speak of its value in the highest terms.

We consider the subject of importance, and have issued a pamphlet giving many cases and references showing both the value of the salt and method of application; sent free.

The great demand for Muriate of Cocaine has exhausted the small stocks in this market. McK. & R. fortunately succeeded, at an early date, in manufacturing a superior quality of the Alkaloid and the Muriate, crystals and solution (2% and 4%), and being the only house able to furnish the pure article in quantity, supplied the market, which would otherwise have been almost bare.

MCKESSON & ROBBINS have received the following letters among many others, in relation to this important anæsthetic:

"439 MONTAGUE ST., BROOKLYN, Dec. 11, 1884.

"It gives me great pleasure to say that I have used the preparation of Hydrochlorate of Cocaine made by MCKESSON & ROBBINS in a great variety of cases of operations on the eye, with the most complete satisfaction to myself. The relief from pain on the part of the patient was perfect, and no statement can be made more enthusaistic than the facts warrant. ARTHUR MATHEWSON, M. D.,

"*Surgeon Brooklyn Eye and Ear Hospital.*"

"123 E. 25th ST., Dec. 10, 1884.

"MESSRS. MCKESSON & ROBBINS:

"*Gents.*—The specimen of Cocaine which you left with me a few weeks ago, has given great satisfaction. I have used it in more than a hundred cases of all kinds of painful affections of the eye and ear, and in a great many operations upon the eye, such as cataract-extractions, squint-operations and others, and the preparation has produced complete anæsthesia in all cases.

"Sincerely yours, DR. MITTENDORF."

Repeated demands have led us to add an Oleate Cocaine, containing 5% Alkaloid, to our list.

McK. & R. MURIATE COCAINE, WHITE CRYSTALS.
5 grain, 10 grain, and 1 gramme vials.

McK. & R. MURIATE COCAINE SOLUTION.
Solution of 2% and 4%, in vials of 1 gramme, ½, ¼ and 1 ounce.

McK. & R. OLEATE COCAINE (5% Alkaloid).
In vials of ½, ¼ and 1 ounce.

McK. & L. COCAINE CASES.
No. 1 contains two ½ oz vials 4% McK. & R. Solution and one Medicine Dropper, each, $3.50.
No. 2 contains two ½ oz vials 2% McK. & R. Solution and one Medicine Dropper, each, 2.50.

McKESSON & ROBBINS,
1453-1504eow **Manufacturing Chemists, New York.**

Dr. Chadwick's Gynecological Table.

This table is offered to the profession as a substitute for the unsightly, often ill-adapted, and expensive chairs that have commonly been used by gynecologists for examinations.

It is of thoroughly-seasoned black-walnut, well fitted and finished, and when not in use will pass for an ordinary desk. It is provided with hair-stuffed, and hair-cloth-covered mattress, leg and foot rests, making it adapted for Sims' position, dorsal position, etc., also with drawers and compartments for instruments, tampons, pessaries, absorbents, and with glass-stopped bottles and pots for acids, lubricants, etc.

The following advantages are claimed for this table :—

1. That its presence in a physician's office would never excite suspicion as to its use.
2. That it is perfectly adapted for examinations in all positions.
3. That in it may be kept readily accessible all the instruments, appliances, and medicaments likely to be needed.
4. That its moderate price makes it easily obtainable by every physician.

In addition to the uses referred to above, it will be found perfectly adapted to examinations and treatment in diseases of the rectum and genito-urinary organs, while often convenient as a general operating-table.

Price	$50.00
Boxing	2.50

[COPY OF A LETTER FROM PROFESSOR FORDYCE BARKER.]

NEW YORK, April 16, 1878.

MESSRS. CODMAN & SHURTLEFF, 13 Tremont Street, Boston.

Dear Sirs,—I have now had the Gynecological Table in daily use for some time, and have great pleasure in informing you that I am better pleased with it than with anything of the kind that I have had or seen before. My patients find it less fatiguing than the old Speculum Chair, which I formerly used. I take every opportunity to show it to physicians who visit me, and all seem equally pleased with it. As yet I have not seen anything for which I should wish to change it. Yours sincerely,

FORDYCE BARKER.

Circulars with full discription and other cuts will be sent on application to the makers,

CODMAN & SHURTLEFF,

13 and 15 Tremont Street, Boston.

Size of Hydroleine Bottle Increased One-half, now 12 Ounces, instead of 8 Ounce Bottle.

30,000 PHYSICIANS

NOW PRESCRIBE

HYDROLEINE

(HYDRATED OIL,)

For Consumption and Wasting Diseases. It Produces Immediate Increase in Flesh and Weight.

FORMULA.

Each Dose of Two Teaspoonfuls, equal to 120 Drops, contains:

Pure Cod Liver Oil	80 m. (drops)	Soda	½ Grain.
Distilled Water	35 "	Boric Acid	¼ "
Soluble Pancreatin	5 Grains.	Hyocholic Acid	1/10 "

DOSE:

Two teaspoonfuls alone, or with twice the quantity of water, to be taken thrice daily after meals.

Hydroleine (Hydrated Oil) is not a simple alkaline emulsion of oleum morrhua, but a hydro-pancreated preparation containing acids and a modicum of soda. Pancreatin is the digestive principle of fatty foods, and, in the soluble form here used, completely saponifies the oleaginous material so necessary to the reparative process in all wasting diseases.

Lautenbach's researches on the function of the liver would show the beautiful adjustment of therapeutics in preparation of Hydroleine, furnishing, as it does, the acid and soda necessary to prevent self-poisoning by reabsorption of morbid tubercular detritus and purulent matters into the general circulation.

Each bottle in nutritive value exceeds ten times the same bulk of cod liver oil. It is economical in use and certain in result.

Sold at all Drug Stores at $1.00 per Bottle.

The principles upon which this discovery is based have been described in a treatise on "The Digestion and Assimilation of Fats in the Human Body," by H. C. BARTLETT, Ph. D., F. C. S., and the experiments which were made, together with cases illustrating the effect of Hydrated Oil in practice, are concisely stated in a Treatise on "Consumption and Wasting Diseases," by G. OVEREND DREWRY, M. D. 1440-1491

Copies of these Works sent free on Application.

WM. F. KIDDER & CO., 83 John Street, New York.

Agents for U. S.

THE JEFFERSON MEDICAL COLLEGE OF PHILADELPHIA.

POST-GRADUATE COURSE.

SESSION 1884-1885.

WILLIAM THOMSON, M. D., (Hon. Professor of Ophthalmology), Ophthalmology, at Jefferson Medical College Hospital.

LAWRENCE TURNBULL, M. D. and CHARLES S. TURNBULL, M. D., Otology, at Jefferson Medical College Hospital.

JOHN C. DaCOSTA, M. D., Gynæcology, at Jefferson Medical College Hospital.

O. H. ALLIS, M. D., Orthopædic Surgery and Diseases of the Joints, at Jefferson Medical College Hospital.

J. C. WILSON, M. D., Diseases of the Chest and Physical Diagnosis, at Jefferson Medical College Hospital.

MORRIS LONGSTRETH, M. D., Pathology and Microscopic Examinations, at Jefferson Medical College.

JOHN V. SHOEMAKER, M. D., Dermatology, at Philadelphia Hospital for Skin Diseases, 923 Locust Street.

GEORGE M. WARD, M. D., Practical Chemistry, at Jefferson Medical College.

JOSEPH S. NEFF, M. D., Urinary Pathology and Examination of Urine, at Jefferson Medical College Hospital.

J. T. ESKRIDGE, M. D., and LAMBERT OTT, M. D., Diseases of the Nervous System, at Jefferson Medical College Hospital.

CHARLES E. SAJOUS, M. D. and LOUIS JURIST, M. D., Laryngology and Rhinology, at Jefferson Medical College Hospital.

S. M. McCOLLIN, M. D., Practical Pharmacy and Materia Medica, at Jefferson Medical College.

A. K. MINICH, M. D., Materia Medica and Medical Botany, at Jefferson Medical College.

A. R. RAINEAR, M. D., Experimental Therapeutics, at Jefferson Medical College.

GEORGE McCLELLAN, M. D., Operative Surgery, at Pennsylvania School of Anatomy and Surgery, Tenth and Medical Streets.

WILLIAM B. ATKINSON, M. D., Diseases of Children, at Howard Hospital.

JOSEPH W. HEARN, M. D., Syphilis and Genito-Urinary Diseases, at the Jefferson Medical College and Philadelphia Hospitals.

The daily dispensary services on Skin Diseases at 11 a. m., the Throat at 12 m., the Ear at 1 p. m., and the Eye at 2 p. m., are accessible to physicians every day. Pathological Laboratory is open daily at all hours; the Pharmaceutical every morning at 10 a. m., the Experimental Therapeutics Wednesdays and Saturdays, and other available working hours. Physicians can enter at any time after Matriculation in the College. The courses are divided into six weeks each, and physicians are permitted, with the exception of graduates of other schools of less than ten years, who intend taking a graduating course, without additional expense, to attend the general Lectures and Clinics at the College and Hospital.

For further information apply to

1459-1484 eow **ROBERTS BARTHOLOW, M. D., Dean.**

SOLUTION FERROUS MALATE.

FOUR GRAINS TO FLUID DRACHM

A Chalybeate that has all the virtues and none of the defects of all other forms of iron.

We have the pleasure and satisfaction of placing in the hands of the profession a preparation of iron for which all the above claims have been verified, both in the laboratory and by the clinical experience of many of the leading physicians of the country.

Solution Ferrous Malate is a proto-compound, the form in which iron is most readily assimilated; the iron being united with a fruit acid in solution, is also rendered palatable, and does not injure or blacken the enamel of the teeth. It exerts the full therapeutic influence of iron, while it does not constipate, nauseate, produce headache or any of the other unpleasant effects resulting from the use of ordinary forms of iron.

SOLUTION FERROUS MALATE

Is a definite and permanent Chemical Compound, entirely different from the variable and unstable watery solutions made after the cheaper and indefinite manner of Tinct. Ferri Pomata of the German Pharmacopœia. Physicians are therefore particularly requested to write the name in full, in order that their patients may always receive that which they intend to prescribe.

SOLUTION FERROUS MALATE is manufactured only by

THE AMERICAN PHARMACEUTICAL MANUFACTURING CO.

815 FILBERT STREET, PHILADELPHIA.

Solution Salicylate of Iron. (Amer. Pharm. Mfg. Co.)

An unfailing remedy in acute or chronic RHEUMATISM where deformity has not yet resulted.

This preparation has also been prescribed with great satisfaction in other affections where Salicylic Acid, Bicarbonate of Sodium and Ferrous Malate are indicated.

Dose.—Dessert to tablespoonful four times a day.

JOHN C. BAKER & CO.,

WHOLESALE AGENTS,

No. 815 FILBERT STREET, PHILADELPHIA.